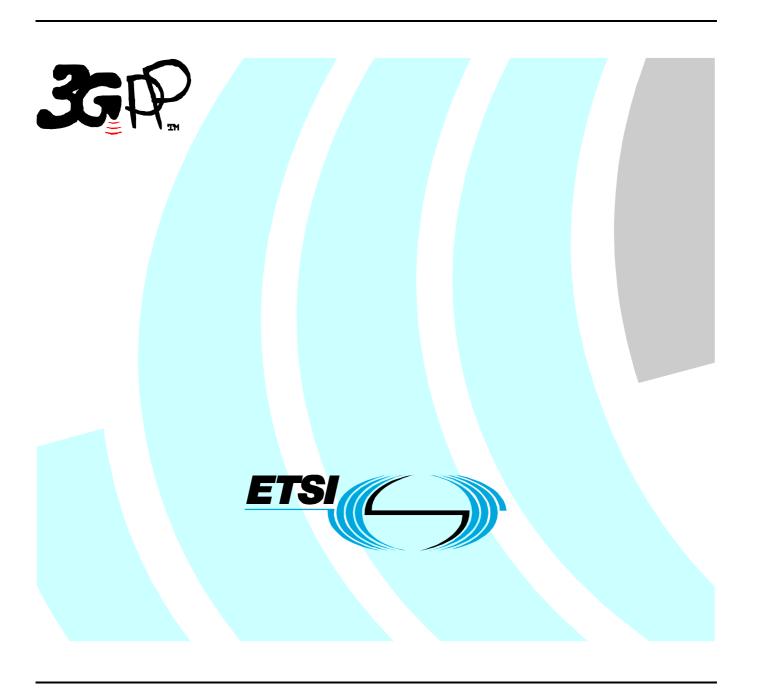
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Foreword

This Technical Specification has been produced by the 3GPP.

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

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- x the first digit:
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1 Scope

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

2 References

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

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

[19]	3GPP TS25.221: "Physical channels and mapping of transport channels onto physical channels[TDD]".
[20]	3GPP TS 25.223: "Spreading and modulation (TDD)".
[21]	3GPP TS 25.224: "Physical Layer Procedures (TDD)".
[22]	3GPP TS 25.133: "Requirements for support of Radio Resource management (FDD)".
[23]	3GPP TS 25.123: "Requirements for support of Radio Resource management (TDD)".
[24]	3GPP TS 25.435: "UTRAN Iub Interface: User Plane Protocols for Common Transport Channel Data Streams".
[25]	3GPP TS 25.302: "Services Provided by the Physical Layer".
[26]	3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
[27]	ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".
[28]	RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".
[29]	IETF RFC 2460 "Internet Protocol, Version 6 (IPv6) Specification".
[30]	IETF RFC 768 "User Datagram Protocol", (8/1980)
[31]	3GPP TS 25.434: "UTRAN Iub Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams ".
[32]	3GPP TS 25.321: "MAC protocol specification".
[33]	3GPP TS 25.306: "UE Radio Access capabilities".
[34]	3GPP TS 25.222: "Multiplexing and Channel Coding (TDD)".
[35]	IETF RFC 2474 "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".
[36]	IETF RFC 2475 "An Architecture for Differentiated Services".
[37]	3GPP TS 25.304: "User Equipment (UE) procedures in idle mode and procedures for cell reselection in connected mode".
[38]	3GPP TS 25.309: "FDD Enhanced Uplink; Overall description; Stage 2".

3 Definitions, Symbols and Abbreviations

3.1 Definitions

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

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

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

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

Two kinds of EPs are used:

- **Class 1**: Elementary Procedures with response (success or failure).

- Class 2: Elementary Procedures without response.

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

Successful

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

Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

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

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

3.2 Symbols

Void.

3.3 Abbreviations

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

A-GPS Assisted GPS

AICH Acquisition Indicator Channel
ALCAP Access Link Control Application Part

AP-AICH Access Preamble Acquisition Indicator Channel

ASN.1 Abstract Syntax Notation One BCCH Broadcast Control Channel

CCPCH Common Control Physical Channel

CFN Connection Frame Number CM Compressed Mode

CM Compressed Mode
CPCH Common Packet Channel
CPICH Common Pilot Channel

CRNC Controlling Radio Network Controller CSICH CPCH Status Indicator Channel

DCH Dedicated Channel
DGPS Differential GPS
DL Downlink

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

DSCH Downlink Shared Channel
E-DCH Enhanced UL DCH
FACH Forward Access Channel
FDD Frequency Division Duplex

F-DPCH Fractional DPCH Frame Protocol

GPS Global Positioning System

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

HS-PDSCH High Speed Physical Downlink Shared Channel

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

IP Internet Protocol

IPDL Idle Periods in the DownLink ISCP Interference Signal Code Power

L1 Layer 1 L2 Layer 2

MIB Master Information Block

MICH MBMS Notification Indicator Channel

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

PCCPCH Primary Common Control Physical Channel

PCH Paging Channel

PCPCH Physical Common Packet Channel PDSCH Physical Downlink Shared Channel

PICH Paging Indication Channel
PUSCH Physical Uplink Shared Channel
RACH Random Access Channel

RL Radio Link RLS Radio Link Set

RNC Radio Network Controller RRC Radio Resource Control SB Scheduling Block

SCCPCH Secondary Common Control Physical Channel

SCH Synchronisation Channel
SCTD Space Code Transmit Diversity
SIB System Information Block

SRNC Serving Radio Network Controller
SSDT Site Selection Diversity Transmission
STTD Space Time Transmit Diversity

TDD Time Division Duplex

TFC Transport Format Combination

TFCI Transport Format Combination Indicator
TFCS Transport Format Combination Set

TFS Transport Format Set TPC Transmit Power Control

TSTD Time Switched Transmit Diversity

UARFCN UTRA Absolute Radio Frequency Channel Number

UDP User Datagram Protocol

UE User Equipment

UL Uplink

UMTS Universal Mobile Telecommunications System

USCH Uplink Shared Channel

UTRA Universal Terrestrial Radio Access

UTRAN Universal Terrestrial Radio Access Network

4 General

4.1 Procedure Specification Principles

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

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

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

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

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

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

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

4.2 Forwards and Backwards Compatibility

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

4.3 Specification Notations

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

- [FDD] This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.
- [TDD] This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[TDD]" and the section following the heading applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD.
- [3.84Mcps TDD] This tagging of a word indicates that the word preceding the tag "[3.84Mcps TDD]" applies only to 3.84Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[3.84Mcps TDD]" and the section following the heading applies only to 3.84Mcps TDD.
- [1.28Mcps TDD] This tagging of a word indicates that the word preceding the tag "[1.28Mcps TDD]" applies only to 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[1.28Mcps TDD]" and the section following the heading applies only to 1.28Mcps TDD.
- [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 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.

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.

When referring to a message in the specification the MESSAGE NAME is written with all letters in upper case characters followed by the word "message", e.g. RADIO LINK SETUP REQUEST message.

IE When referring to an information element (IE) in the specification the *Information Element Name* is written with the first letters in each word in upper case characters and all letters in Italic font followed by the abbreviation "IE", e.g. *Transport Format Set* IE.

Value of an IE When referring to the value of an information element (IE) in the specification the "Value" is written as it is specified in subclause 9.2 enclosed by quotation marks, e.g. "Abstract Syntax Error (Reject)" or "SSDT Active in the UE".

5 NBAP Services

Message

5.1 Parallel Transactions

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

6 Services Expected from Signalling Transport

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

7 Functions of NBAP

The NBAP protocol provides the following functions:

- Cell Configuration Management. This function gives the CRNC the possibility to manage the cell configuration information in a Node B.
- Common Transport Channel Management. This function gives the CRNC the possibility to manage the configuration of Common Transport Channels in a Node B.
- System Information Management. This function gives the CRNC the ability to manage the scheduling of System Information to be broadcast in a cell.
- Resource Event Management. This function gives the Node B the ability to inform the CRNC about the status of Node B resources.
- Configuration Alignment. This function gives the CRNC and the Node B the possibility to verify and enforce that both nodes have the same information on the configuration of the radio resources.

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

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

Table 1: Mapping between functions and NBAP elementary procedures

Function	Elementary Procedure(s)
Cell Configuration Management	a) Cell Setup
	b) Cell Reconfiguration
	c) Cell Deletion
Common Transport Channel Management	a) Common Transport Channel Setup
	b) Common Transport Channel Reconfiguration
	c) Common Transport Channel Deletion
System Information Management	System Information Update
Resource Event Management	a) Block Resource
	b) Unblock Resource
	c) Resource Status Indication
Configuration Alignment	a) Audit Required
	b) Audit
Measurements on Common Resources	c) Reset a) Common Measurement Initiation
Weasurements on Common Resources	b) Common Measurement Reporting
	c) Common Measurement Termination
	d) Common Measurement Failure
Radio Link Management.	a) Radio Link Setup
	b) Radio Link Addition
	c) Radio Link Deletion
	d) Unsynchronised Radio Link Reconfiguration
	e) Synchronised Radio Link Reconfiguration Preparation
	f) Synchronised Radio Link Reconfiguration
	Commit
	g) Synchronised Radio Link Reconfiguration
	Cancellation
	h) Radio Link Pre-emption
	i) Radio Link Activation
Radio Link Supervision.	j) Radio Link Parameter Update a) Radio Link Failure
radio Ellik Gupervision.	b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup
	b) Radio Link Addition
	c) Compressed Mode Command
	d) Unsynchronised Radio Link Reconfiguration
	e) Synchronised Radio Link Reconfiguration Preparation
	f) Synchronised Radio Link Reconfiguration
	Commit
	g) Synchronised Radio Link Reconfiguration
	Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation
	b) Dedicated Measurement Reporting
	c) Dedicated Measurement Termination d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations	Error Indication
Physical Shared Channel Management	Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Cell Synchronisation [TDD]	a) Cell Synchronisation Initiation
	b) Cell Synchronisation Reconfiguration
	c) Cell Synchronisation Reporting
	d) Cell Synchronisation Termination e) Cell Synchronisation Failure
	f) Cell Synchronisation Adjustment
Information Exchange	a) Information Exchange Initiation
ĭ	b) Information Reporting
	c) Information Exchange Termination
	d) Information Exchange Failure

Function	Elementary Procedure(s)
Bearer Re-arrangement	a) Bearer Re-arrangement Indication
	b) Unsynchronised Radio Link Reconfiguration
	c) Synchronised Radio Link Reconfiguration
	Preparation
	d) Synchronised Radio Link Reconfiguration
	Commit
	e) Synchronised Radio Link Reconfiguration
	Cancellation

8 NBAP Procedures

8.1 Elementary Procedures

NBAP procedures are divided into common procedures and dedicated procedures.

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

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

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

Table 2: Class 1

Elementary	Message	Successful Outcome	Unsuccessful Outcome
Procedure	eeeage	Response message	Response message
Cell Setup	CELL SETUP REQUEST	CELL SETUP RESPONSE	CELL SETUP FAILURE
Cell Reconfiguration	CELL RECONFIGURATION REQUEST	CELL RECONFIGURATION RESPONSE	CELL RECONFIGURATION FAILURE
Cell Deletion	CELL DELETION REQUEST	CELL DELETION RESPONSE	
Common	COMMON TRANSPORT	COMMON TRANSPORT	COMMON TRANSPORT
Transport	CHANNEL SETUP	CHANNEL SETUP	CHANNEL SETUP
Channel Setup	REQUEST	RESPONSE	FAILURE
Common	COMMON TRANSPORT	COMMON TRANSPORT	COMMON TRANSPORT
Transport Channel	CHANNEL RECONFIGURATION	CHANNEL RECONFIGURATION	RECONFIGURATION
Reconfiguration	REQUEST	RESPONSE	FAILURE
Common	COMMON TRANSPORT	COMMON TRANSPORT	7,1201(2
Transport	CHANNEL DELETION	CHANNEL DELETION	
Channel Deletion	REQUEST	RESPONSE	
Physical Shared	PHYSICAL SHARED	PHYSICAL SHARED	PHYSICAL SHARED
Channel	CHANNEL	CHANNEL	CHANNEL
Reconfiguration	RECONFIGURATION REQUEST	RECONFIGURATION RESPONSE	RECONFIGURATION FAILURE
Audit	AUDIT REQUEST	AUDIT RESPONSE	AUDIT FAILURE
Block Resource	BLOCK RESOURCE	BLOCK RESOURCE	BLOCK RESOURCE
	REQUEST	RESPONSE	FAILURE
Radio Link Setup	RADIO LINK SETUP	RADIO LINK SETUP	RADIO LINK SETUP
	REQUEST	RESPONSE	FAILURE
System Information Update	SYSTEM INFORMATION UPDATE REQUEST	SYSTEM INFORMATION UPDATE RESPONSE	SYSTEM INFORMATION UPDATE FAILURE
Common	COMMON MEASUREMENT	COMMON	COMMON
Measurement Initiation	INITIATION REQUEST	MEASUREMENT INITIATION RESPONSE	MEASUREMENT INITIATION FAILURE
Radio Link	RADIO LINK ADDITION	RADIO LINK ADDITION	RADIO LINK ADDITION
Addition	REQUEST	RESPONSE	FAILURE
Radio Link Deletion	RADIO LINK DELETION REQUEST	RADIO LINK DELETION RESPONSE	
Synchronised	RADIO LINK	RADIO LINK	RADIO LINK
Radio Link Reconfiguration Preparation	RECONFIGURATION PREPARE	RECONFIGURATION READY	RECONFIGURATION FAILURE
Unsynchronised	RADIO LINK	RADIO LINK	RADIO LINK
Radio Link	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION
Reconfiguration Dedicated	REQUEST DEDICATED	RESPONSE DEDICATED	FAILURE DEDICATED
Measurement	MEASUREMENT	MEASUREMENT	MEASUREMENT
Initiation	INITIATION REQUEST	INITIATION RESPONSE	INITIATION FAILURE
Reset	RESET REQUEST	RESET RESPONSE	
Cell	CELL SYNCHRONISATION	CELL	CELL
Synchronisation Initiation [TDD]	INITIATION REQUEST	SYNCHRONISATION INITIATION RESPONSE	SYNCHRONISATION INITIATION FAILURE
Cell Synchronisation Reconfiguration [TDD]	CELL SYNCHRONISATION RECONFIGURATION REQUEST	CELL SYNCHRONISATION RECONFIGURATION RESPONSE	CELL SYNCHRONISATION RECONFIGURATION FAILURE
Cell Synchronisation Adjustment [TDD]	CELL SYNCHRONISATION ADJUSTMENT REQUEST	CELL SYNCHRONISATION ADJUSTMENT RESPONSE	CELL SYNCHRONISATION ADJUSTMENT FAILURE
Information Exchange Initiation	INFORMATION EXCHANGE INITIATION REQUEST	INFORMATION EXCHANGE INITIATION RESPONSE	INFORMATION EXCHANGE INITIATION FAILURE

Table 3: Class 2

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

8.2 NBAP Common Procedures

8.2.1 Common Transport Channel Setup

8.2.1.1 General

This procedure is used for establishing the necessary resources in Node B, regarding Secondary CCPCH, PICH, PRACH, PCPCH [FDD], AICH [FDD], AP_AICH [FDD], CD/CA-ICH [FDD], FACH, PCH, RACH, FPACH [1.28Mcps TDD] and CPCH [FDD].

8.2.1.2 Successful Operation

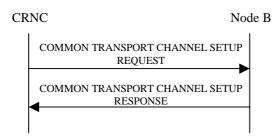


Figure 1: Common Transport Channel Setup procedure, Successful Operation

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

One message can configure only one of the following combinations:

- [FDD one Secondary CCPCH, and FACHs, PCH, PICH and MICH related to that Secondary CCPCH], or
- [TDD one CCTrCH consisting of Secondary CCPCHs and FACHs, PCH with the corresponding PICH and MICH related to that group of Secondary CCPCHs], or
- one [1.28Mcps TDD or more] PRACH, one RACH and one AICH [FDD] and one FPACH[1.28Mcps TDD] related to that PRACH.
- [FDD PCPCHs, one CPCH, one AP_AICH and one CD/CA-ICH related to that group of PCPCHs.]

Secondary CCPCH:

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

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

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

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

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

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

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

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

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

PRACH:

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

[1.28Mcps TDD - FPACH]:

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

Where more than one FPACH is defined, the FPACH that Node B should use is defined by the UpPCH signature (SYNC_UL) code that the UE used. The FPACH number = N mod M where N denotes the signature number (0..7) and M denotes the number of FPACHs that are defined in a cell. The FPACH number is in ascending order by *Common Physical Channel ID* IE contained in the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[FDD - PCPCHs]:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *CPCH Parameters* IE, the Node B shall configure and activate the indicated CPCH and the associated PCPCH(s), AP-AICH and CD/CA-ICH according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *CD Signatures* IE, the Node B may use only the given CD signatures on CD/CA-ICH. Otherwise, the Node B may use all the CD signatures on CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *CD Sub Channel Numbers* IE, the Node B may use only the given CD Sub Channels on CD/CA-ICH. Otherwise, the Node B may use all the CD Sub Channels on CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *Channel Request Parameters* IE, the Node B shall use the parameters to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *Channel Request Parameters* IE, the Node B shall use only these AP sub channel number to distinguish the configured PCPCH. Otherwise all AP subchannel numbers are used to distinguish the configured PCPCH.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in *SF Request Parameters* IE, the Node B shall use only these AP sub channel number to distinguish the requested Spreading Factors. Otherwise all AP subchannel numbers are used to distinguish the configured Spreading Factor.

General:

After successfully configuring the requested common transport channels and the common physical channels, the Node B shall store the value of *Configuration Generation ID* IE and it shall respond with the COMMON TRANSPORT CHANNEL SETUP RESPONSE message with the *Common Transport Channel ID* IE, the *Binding ID* IE and the *Transport Layer Address* IE for the configured common transport channels.

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

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

8.2.1.3 Unsuccessful Operation

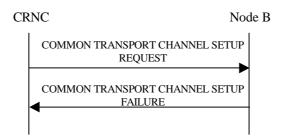


Figure 2: Common Transport Channel Setup procedure, Unsuccessful Operation

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

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

Typical cause values are as follows:

Radio Network Layer Cause:

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

Transport Layer Cause:

- Transport Resources Unavailable

Miscellaneous Cause:

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

8.2.1.4 Abnormal Conditions

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

[FDD - If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *CD Sub Channel Numbers* IE, but the *CD Signatures* IE is not present, then the Node B shall reject the procedure using the COMMON TRANSPORT CHANNEL SETUP FAILURE message.]

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

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

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

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

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

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

8.2.2 Common Transport Channel Reconfiguration

8.2.2.1 General

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

8.2.2.2 Successful Operation

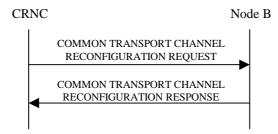


Figure 3: Common Transport Channel Reconfiguration, Successful Operation

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

One message can configure only one of the following combinations:

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

SCCPCH:

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

FACH:

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

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

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

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

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

PCH:

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

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

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

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

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

PICH:

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

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

MICH:

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

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

[FDD - PRACH]:

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

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

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

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

[FDD - AICH]:

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

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

[FDD - CPCH]:

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

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *UL SIR* IE, the Node B shall reconfigure the UL SIR for the UL power control for the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall reconfigure the Initial DL Transmission Power for the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration of the indicated CPCH and never transmit with a higher power on any DL PCPCHs once the new configuration is being used.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration of the indicated CPCH and never transmit with a lower power on any DL PCPCHs once the new configuration is being used.

[FDD - AP-AICH]:

If the AP-AICH Parameters IE is present, the Node B shall reconfigure the indicated AP-AICH.

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

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

[FDD - CD/CA-ICH]:

If the CD/CA-ICH Parameters IE is present, the Node B shall reconfigure the indicated CD/CA-ICH.

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

[1.28Mcps TDD - FPACH]:

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

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

General:

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

8.2.2.3 Unsuccessful Operation

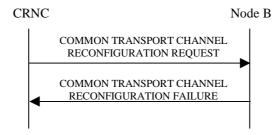


Figure 4: Common Transport Channel Reconfiguration procedure, Unsuccessful Operation

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

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

Typical cause values are as follows:

Radio Network Layer Cause:

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

Transport Layer Cause:

- Transport Resources Unavailable

Miscellaneous Cause:

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

8.2.2.4 Abnormal Conditions

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8.2.3 Common Transport Channel Deletion

8.2.3.1 General

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

8.2.3.2 Successful Operation

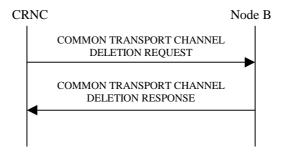


Figure 5: Common Transport Channel Deletion procedure, Successful Operation

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

Secondary CCPCH:

If the *Common Physical Channel ID* IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates a Secondary CCPCH, the Node B shall delete the indicated channel and the FACHs and

PCH supported by that Secondary CCPCH. If there is a PCH that is deleted, the PICH associated with that PCH shall also be deleted. If an S-CCPCH is deleted, the MICH associated with that S-CCPCH shall also be deleted.

PRACH:

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

[FDD - PCPCHs]:

If the *Common Physical Channel ID* IE contained in the COMMON TRANSPORT CHANNEL DELETION REQUEST message indicates one of the PCPCHs for a CPCH, the Node B shall delete all PCPCHs associated with the indicated channel and the CPCH supported by these PCPCHs. The AP-AICH and CD/CA-ICH associated with the CPCH shall also be deleted.

General:

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

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

8.2.3.3 Unsuccessful Operation

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8.2.3.4 Abnormal Conditions

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

8.2.4 Block Resource

8.2.4.1 General

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

The logical resource that can be blocked is a cell.

8.2.4.2 Successful Operation

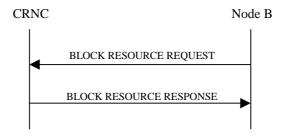


Figure 6: Block Resource procedure, Successful Operation

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

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

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

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

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

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

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

Interactions with the Unblock Resource procedure:

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

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

8.2.4.3 Unsuccessful Operation

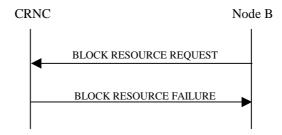


Figure 7: Block Resource procedure, Unsuccessful Operation

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

Typical cause values are as follows:

Miscellaneous Cause:

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

Radio Network Layer Cause:

- Priority transport channel established

8.2.4.4 Abnormal Conditions

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8.2.5 Unblock Resource

8.2.5.1 General

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

The logical resource that can be unblocked is a cell.

8.2.5.2 Successful Operation



Figure 8: Unblock Resource procedure, Successful Operation

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

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

8.2.5.3 Abnormal Conditions

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8.2.6 Audit Required

8.2.6.1 General

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

8.2.6.2 Successful Operation



Figure 9: Audit Required procedure, Successful Operation

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

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

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

8.2.6.3 Abnormal Conditions

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8.2.7 Audit

8.2.7.1 General

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

8.2.7.2 Successful Operation

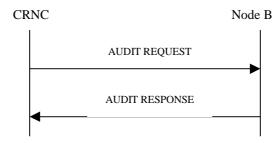


Figure 10: Audit procedure, Successful Operation

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

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

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

Information Provided In One Audit Sequence:

The Node B shall include one *Local Cell Information* IE for each local cell present in the Node B. The Node B shall include the *Maximum DL Power Capability* IE, the *Minimum Spreading Factor* IE and the *Minimum DL Power Capability* IE when any of those values are known by the Node B. The Node B shall include the *HSDPA Capability* IE set to "HSDPA Capable" for every HSDPA-capable Local Cell. The Node B shall include the *E-DCH Capability* IE set to "E-DCH Capable" for every E-DCH-capable Local Cell.

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

If the Node B internal resources are pooled for a group of cells, the Node B shall include one *Local Cell Group Information* IE containing the Node B internal resource capacity and the consumption laws per group of cells. If the *UL Capacity Credit* IE is not present in the *Local Cell Group Information* IE, then the internal resource capabilities of the Node B for the Local Cell Group are modelled as shared resources between Uplink and Downlink.

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

The Node B shall include, for each local cell present in the Node B, the Node B internal resource capability and consumption laws within the *Local Cell Information* IE. If the *UL Capacity Credit* IE is not present in the *Local Cell Information* IE, then the internal resource capabilities of the local cell are modelled as shared resources between Uplink and Downlink. If the Local Cell utilises Node B internal resource capabilities that are pooled for several Local Cell(s), the *Local Cell Group ID* IE shall contain the identity of the used Local Cell Group ID IE shall contain the identity of the concerned Power Local Cell Group.

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

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

8.2.7.3 Unsuccessful Operation



Figure 10A: Audit procedure, Unsuccessful Operation

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

8.2.7.4 Abnormal Conditions

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

8.2.8 Common Measurement Initiation

8.2.8.1 General

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

8.2.8.2 Successful Operation

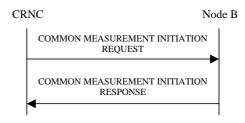


Figure 11: Common Measurement Initiation procedure, Successful Operation

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

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

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

[FDD - If the *Spreading Factor* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of the *Spreading Factor* IE.]

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

Common measurement type:

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

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

Report characteristics:

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

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

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

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

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

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

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

If the *Report Characteristics* IE is set to "Event E", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the Node B shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B. If the *Common Measurement Type* IE is set to "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. If the *Common Measurement Type* IE is set to "Received Total Wide Band Power

for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion" or "HS-DSCH Required Power for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.

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

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

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

$$F_n = 0$$
 for $n = 0$

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

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

 M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

 M_{n-1} is the previous measurement result received after point C in the measurement model [25], measured at SFN_{n-1}.

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

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

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

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

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

a is the last reported $T_{UTRAN-GPS}$ Drift Rate value.

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

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

 M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

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

The $T_{UTRAN-GPS}$ Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [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 Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when 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:

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

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

a is the last reported SFN-SFN.

 M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

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

- If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the 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:

```
\begin{split} P_n &= b \ for \ n = 0 \\ [\text{FDD -} P_n &= ((a/16) * ((SFN_n - SFN_{n-1}) \ mod \ 4096)/100 + P_{n-1}) \ mod \ 614400 \qquad for \ n > 0] \\ [\text{FDD -} F_n &= \min((M_n - P_n) \ mod \ 614400, \ (P_n - M_n) \ mod \ 614400) \qquad for \ n > 0] \\ [\text{TDD -} P_n &= ((a/16) * (15*(SFN_n - SFN_{n-1}) mod \ 4096 + (TS_n - TS_{n-1}))/1500 + P_{n-1}) \ mod \ 40960 \qquad for \ n > 0] \\ [\text{TDD -} F_n &= \min((M_n - P_n) \ mod \ 40960, \ (P_n - M_n) \ mod \ 40960) \qquad for \ n > 0] \end{split}
```

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

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

b is the last reported SFN-SFN value.

abs denotes the absolute value.

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

 M_n is the latest measurement result received after point C in the measurement model [25], measured at [TDD - the Time Slot TS_n of] the Frame SFN_n.

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

The SFN-SFN Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

If the *Report Characteristics* IE is not set to "On Demand", the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists anymore, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

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

Higher 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)

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

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

Common measurement accuracy:

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

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

Measurement Recovery Behavior:

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

Response message:

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

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

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

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

8.2.8.3 Unsuccessful Operation

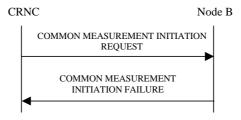


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

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

Typical cause values are as follows:

Radio Network Layer Cause:

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

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE, except for "HS-DSCH Required Power", "HS-DSCH Provided Bit Rate", [FDD - "DL Transmission Branch Load",] "HS-DSCH Required Power for

Cell Portion" and "HS-DSCH Provided Bit Rate for Cell Portion", is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

[FDD - If the Common Measurement Type received in the *Common Measurement Type* IE is "DL Transmission Branch Load" and the Common Measurement Object Type received in the *Common Measurement Object Type* IE is not "Cell" or "Power Local Cell Group" the Node B shall regard the Common Measurement Initiation procedure as failed.]

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

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

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

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

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

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

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

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

Common Measurement Type	Report Characteristics Type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	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	
Acknowledged PRACH Preambles	Х	Х	Х	Х	Х	Х	Х	Х	
UL Timeslot ISCP	X	X	Х	Х	Х	X	Х	Y	
Acknowledged PCPCH Access	X	X	X	X	X	X	X	X	
Preambles Detected PCPCH	Х	Х	X	Х	Х	Х	X	Х	
Access Preambles UTRAN GPS Timing of Cell Frames for UE Positioning	X	X							X
SFN-SFN Observed Time Difference	Х	Х							Х
Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission	X	X	X	X	X	X	X	X	
HS-DSCH Required Power	Х	Х	Х	Х			Х	Х	
HS-DSCH Provided Bit Rate	Х	Х							
Received Total Wide Band Power for Cell Portion	Х	Х	Х	Х	Х	Х	Х	Х	
Transmitted Carrier Power for Cell Portion	Х	Х	Х	Х	Х	Х	Х	Х	
Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion	Х	Х	Х	Х	Х	Х	X	Х	
UpPTS interference	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	
DL Transmission Branch Load	Х	Х	Х	Х			Х	Х	
HS-DSCH Required Power for Cell Portion	Х	Х	Х	Х			Х	Х	
HS-DSCH Provided Bit Rate for Cell Portion	Х	Х							

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

8.2.9 Common Measurement Reporting

8.2.9.1 General

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

8.2.9.2 Successful Operation



Figure 13: Common Measurement Reporting procedure, Successful Operation

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

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

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

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

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

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

8.2.9.3 Abnormal Conditions

8.2.10 Common Measurement Termination

8.2.10.1 General

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

8.2.10.2 Successful Operation



Figure 14: Common Measurement Termination procedure, Successful Operation

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

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

8.2.10.3 Abnormal Conditions

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8.2.11 Common Measurement Failure

8.2.11.1 General

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

8.2.11.2 Successful Operation



Figure 15: Common Measurement Failure procedure, Successful Operation

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

8.2.11.3 Abnormal Conditions

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8.2.12 Cell Setup

8.2.12.1 General

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

8.2.12.2 Successful Operation

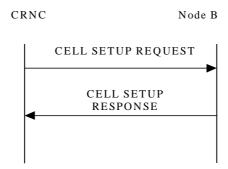


Figure 16: Cell Setup procedure, Successful Operation

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

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

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

[FDD - If the *Closed Loop Timing Adjustment Mode* IE is included in the CELL SETUP REQUEST message, the value shall be stored in the Node B and applied when closed loop Feed-Back mode diversity is used on DPCH.]

[TDD - If the *Reference SFN Offset* IE is included in the CELL SETUP REQUEST message, the Node B where a reference clock is connected shall consider the SFN derived from the synchronisation port and the reference offset for reference time setting. All other Node Bs shall ignore the *Reference SFN Offset* IE if included.]

[FDD - If the *IPDL Parameter Information* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL FDD Parameters* IE, the IPDL shall be operated in burst mode according to ref [10].]

[3.84Mcps TDD - If the *IPDL Parameter Information* IE containing *IPDL TDD Parameters* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 3.84Mcps TDD mode shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Parameters* IE, the IPDL shall be operated in burst mode according to ref [21].]

[1.28Mcps TDD - If the *IPDL Parameter Information LCR* IE containing *IPDL TDD Parameters LCR* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 1.28Mcps TDD mode shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Parameters LCR* IE, the IPDL shall be operated in burst mode according to ref [21].]

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

[FDD - When the cell is successfully configured the CPICH(s), Primary SCH, Secondary SCH, Primary CCPCH and BCH exist.][3.84Mcps TDD - When the cell is successfully configured the SCH, Primary CCPCH and BCH exist and the switching-points for the 3.84Mcps TDD frame structure are defined.] [1.28Mcps TDD - When the cell is successfully configured, the DwPCH, Primary CCPCH and BCH exist and the switching-points for the 1.28Mcps TDD frame structure are defined.] The cell and the channels shall be set to the state Enabled [6].

[FDD - If the CELL SETUP REQUEST message includes the *PDSCH Information* IE, the Node B shall, if supported, store the values included in the *Maximum PDSCH Power* IE and apply the indicated maximum power levels to the PDSCH.]

[TDD - The Node B shall ignore the DPCH/PUSCH/PRACH Constant Value IEs.]

8.2.12.3 Unsuccessful Operation

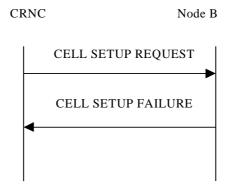


Figure 17: Cell Setup procedure: Unsuccessful Operation

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

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

The Cause IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause:

- S-CPICH not supported
- Requested Tx Diversity Mode not supported
- Power level not supported
- Node B Resources unavailable
- IPDL not supported

Miscellaneous Cause:

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

8.2.12.4 Abnormal Conditions

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

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

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

8.2.13 Cell Reconfiguration

8.2.13.1 General

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

8.2.13.2 Successful Operation

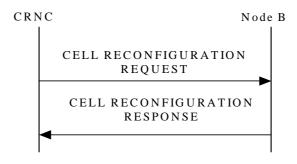


Figure 18: Cell Reconfiguration procedure, Successful Operation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[FDD – If the CELL RECONFIGURATION REQUEST message includes the *PDSCH Information* IE, the Node B shall, if supported, store the values included in the *Maximum PDSCH Power* IE and apply the indicated maximum power levels to the PDSCH. For spreading factors for which a maximum PDSCH power level was already configured and the CELL RECONFIGURATION REQUEST does not provide a new value for the concerning spreading factor, the Node B shall continue to use the existing value.]

8.2.13.3 Unsuccessful Operation

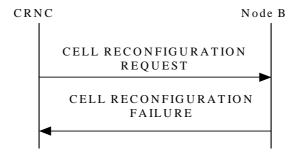


Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation

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

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

The Cause IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause:

- Power level not supported
- Node B Resources unavailable
- IPDL not supported

Miscellaneous Cause:

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

8.2.13.4 Abnormal Conditions

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

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

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

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

8.2.14 Cell Deletion

8.2.14.1 General

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

8.2.14.2 Successful Operation

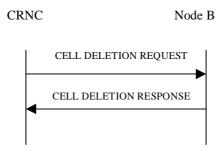


Figure 20: Cell Deletion procedure, Successful Operation

The procedure is initiated with a CELL DELETION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon reception, the Node B shall remove the cell and any remaining common and dedicated channels within the cell. The states for the cell and the deleted common channels shall be set to Not Existing [6]. The Node B shall remove all Radio Links from the Cell and all Node B Communication Contexts that as a result do not have a Radio Link. The Node B shall also initiate release of the user plane transport bearers for the removed common and dedicated channels.

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

8.2.14.3 Unsuccessful Operation

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8.2.14.4 Abnormal Conditions

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

8.2.15 Resource Status Indication

8.2.15.1 General

This procedure is used in the following cases:

- 1. When a Local Cell becomes Existing at the Node B.
- 2. When a Local Cell is to be deleted in Node B, i.e. becomes Not Existing.
- 3. When the capabilities of the Local Cell change at the Node B.
- 4. When a cell has changed its capability and/or its resource operational state at the Node B.
- 5. When common physical channels and/or common transport channels have changed their capabilities at the Node B.
- 6. When a Communication Control Port has changed its resource operational state at the Node B.
- 7. When a Local Cell Group has changed its resource capability at the Node B.

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

8.2.15.2 Successful Operation



Figure 21: Resource Status Indication procedure, Successful Operation

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

Local Cell Becomes Existing:

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

When the capacity credits and consumption laws are shared between several Local Cells, the Node B includes the *Local Cell Group ID* IE for the Local Cell. If the *Local Cell Group Information* IE has not already been reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include the capacity credits and the consumption laws in the *Local Cell Group Information* IE.

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

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

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

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

Local Cell Deletion:

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

Capability Change of a Local Cell:

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

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

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

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

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

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

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

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

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

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

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

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

Capability Change of a Cell:

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

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

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

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

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

Capability Change of a Communication Control Port:

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

Capability Change of HS-DSCH Resources:

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

Capability Change of a Local Cell Group:

When the resource capabilities of a Local Cell Group change at the Node B, the Node B shall report the new capability by sending a RESOURCE STATUS INDICATION message containing a "Service Impacting" Indication and the *Local Cell Group Information* IE reporting the change. The *Cause* IE in the RESOURCE STATUS INDICATION message shall be set to an appropriate value. If the RESOURCE STATUS INDICATION message contains both the *DL Or Global Capacity Credit* IE and the *UL Capacity Credit* IE, then the internal resource capabilities of the Node B are modelled independently in the Uplink and Downlink direction. If the *UL Capacity Credit* IE is not present, then the internal resource capabilities of the Node B are modelled as shared resources between Uplink and Downlink.

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

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

Capability Change of a Power Local Cell Group:

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

General:

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

8.2.15.3 Abnormal Conditions

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8.2.16 System Information Update

8.2.16.1 General

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

8.2.16.2 Successful Operation

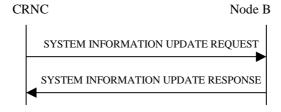


Figure 22: System Information Update procedure, Successful Operation

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

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

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

Information Block addition:

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

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

- SFN mod IB_SG_REP = IB_SG_POS

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

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

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

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

Information Block deletion:

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

Information Block update:

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

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

8.2.16.3 Unsuccessful Operation

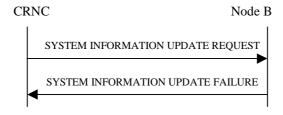


Figure 23: System Information Update procedure, Unsuccessful Operation

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

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

Typical cause values are:

Radio Network Layer Cause:

- SIB Origination in Node B not Supported

Miscellaneous Cause:

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

8.2.16.4 Abnormal Conditions

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

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

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

8.2.17 Radio Link Setup

8.2.17.1 General

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

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

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

8.2.17.2 Successful Operation



Figure 24: Radio Link Setup procedure, Successful Operation

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

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

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

Transport Channels Handling:

DCH(s):

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- [FDD In case of not combining with a RL previously listed in the RADIO LINK SETUP RESPONSE message or for the first RL in the RADIO LINK SETUP RESPONSE message, the Node B shall include in the *DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]
- [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.]

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

In the case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the DCHs in the set of co-ordinated DCHs.

DSCH(s):

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *TFC12 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IEs. The *TFC12 Bearer Information Response* IE containing the *Binding ID* IE and the *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message. If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *TFC12 Bearer Information* IE the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a TFC12 transport bearer.]

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

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

[TDD - USCH(s)]:

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

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

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

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

HS-DSCH:

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

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message.
- The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.
- If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.
- If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the HS-SCCH Specific Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD *HS-SCCH*

Specific Information Response LCR [E] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

- [FDD – If the RADIO LINK SETUP REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10].]

[FDD - E-DCH]:

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

- [FDD The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE in the *RL Information* IE.]
- [FDD The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every E-DCH MAC-d flow being established.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *E-DCH Information* IE for an E-DCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *Data Descriptor Indicator* IE in the *E-DCH Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions for the related reordering queue.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Maximum Number Of Retransmissions For E-DCH* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD The Node B shall include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-RGCH Signature Sequence* and *E-HICH Signature Sequence* IEs 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 in the *RL Information* IE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B, then the Node B shall allocate an E-RNTI identifier for the corresponding RL and include this E-RNTI identifier and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message.]

Physical Channels Handling:

[FDD - Compressed Mode]:

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration*

Change CFN refers to the latest passed CFN with that value The Node B shall treat the received TGCFN IEs as follows:]

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall 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 - DL Code Information]:

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

[TDD - PDSCH RL ID]:

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

[FDD – Phase Reference Handling]:

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

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

General:

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

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

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

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

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP REQUEST message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information* IE is not included in the message, then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP REQUEST message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref. [24]).]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Length Of TFCI2* IE, then the Node B shall apply the length of TFCI (field 2) indicated in the message.]

[FDD - If the RADIO LINK SETUP REQUEST message does not include the *Length Of TFC12* IE and the *Split Type* IE is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits.]

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

[FDD - E-DPCH Handling]:

[FDD – If the *UL DPDCH Indicator For E-DCH Operation* IE is set to "UL DPDCH not present", the *Min UL Channelisation Code Length* IE, the *Puncture Limit* IE and the *TFCS* IE within the *UL DPCH Information* IE shall be ignored.]

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

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

Radio Link Handling:

[FDD - Transmit Diversity]:

[FDD - When the *Diversity Mode* IE is set to "STTD", "Closedloop mode1" or "Closedloop mode2", the Node B shall activate/deactivate the Transmit Diversity for each Radio Link in accordance with the Transmit Diversity Indication IE]

DL Power Control:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:

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

General:

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the SSDT Cell Identity IE and the S-Field Length IE, the Node B shall activate SSDT, if supported, using the SSDT Cell Identity IE and SSDT Cell Identity Length IE.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Qth Parameter* IE in addition to the *SSDT Cell Identity* IE, the Node B shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated.]

[FDD - Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the Node B.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity for EDSCHPC* IE, the Node B shall activate enhanced DSCH power control, if supported, using the *SSDT Cell Identity For EDSCHPC* IE and *SSDT Cell Identity Length* IE as well as *Enhanced DSCH PC* IE in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity* IE and *SSDT Cell Identity For EDSCHPC* IE, then the Node B shall ignore the value in *SSDT Cell Identity For EDSCHPC* IE. If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

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

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

[FDD - Radio Link Set Handling]:

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

[FDD - For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication Context.]

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

[FDD - The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set.]

Response Message:

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

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

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

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

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

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

8.2.17.3 Unsuccessful Operation



Figure 25: Radio Link Setup procedure, Unsuccessful Operation

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

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

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

Typical cause values are as follows:

Radio Network Layer Cause:

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- DPC mode change not supported
- Delayed Activation not supported
- HARQ Preamble Mode not supported
- F-DPCH not supported.

Transport Layer Cause:

- Transport Resources Unavailable

Miscellaneous Cause:

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

8.2.17.4 Abnormal Conditions

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

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

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

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Length Of TFCI2* IE but the *TFCI Signalling Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message does not include the *Length Of TFC12* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

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

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

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

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

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink, if at least one Transmission Gap Pattern Sequence is configured with an SF/2 downlink compressed mode method in the Compressed Mode Configuration and if the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Code Information* IE for any DL Channelisation Code, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

8.2.18 Physical Shared Channel Reconfiguration

8.2.18.1 General

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

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

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

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

8.2.18.2 Successful Operation

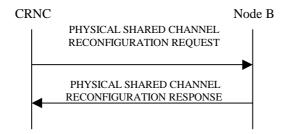


Figure 26: Physical Shared Channel Reconfiguration, Successful Operation

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

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

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

HS-DSCH Resources:

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

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

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

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

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

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

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

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

- If the *HS-PDSCH TDD Information* IE contains no [3.84 Mcps TDD *DL Timeslot and Code Information* IE] [1.28 Mcps TDD *DL Timeslot and Code Information LCR* IE], delete any existing HS-PDSCH resources from the cell.
- If the *HS-PDSCH TDD Information* IE contains [3.84 Mcps TDD *DL Timeslot and Code Information* IE] [1.28 Mcps TDD *DL Timeslot and Code Information LCR* IE] and HS-PDSCH resources are not currently configured in the cell, use this IE as the list of timeslots / codes for HS-PDSCH channels.
- If the *HS-PDSCH TDD Information* IE contains [3.84 Mcps TDD *DL Timeslot and Code Information* IE] [1.28 Mcps TDD *DL Timeslot and Code Information LCR* IE] and HS-PDSCH resources are currently configured in the cell, replace the current list of timeslots / codes with this new list of timeslots / codes for HS-PDSCH channels.]

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

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

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

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

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

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

- if the *Number Of HS-PDSCH Codes* IE is set to "0", delete any existing HS-PDSCH resources from the cell portion indicated by *Cell Portion* ID IE.

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

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

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

[FDD - E-DCH Resources]:

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

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

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

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

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

[TDD - PDSCH/PUSCH Addition]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be added, the Node B shall add these new sets to its PDSCH/PUSCH configuration.]

[1.28Mcps TDD - If the *TSTD Indicator* IE is included in *PDSCH To Add Information LCR* IE and is set to "active", the Node B shall activate TSTD diversity for PDSCH transmissions using the specified PDSCH Set that are not beacon channels [19,21]. If the *TSTD Indicator* IE is set to "not active" or the *TSTD Indicator* IE is not included in *PDSCH To Add Information LCR* IE, the Node B shall not activate TSTD diversity for the PDSCH Set.]

[TDD - PDSCH/PUSCH Modification]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of [3.84Mcps TDD - *DL/UL Code Information IE, Midamble Shift And Burst Type IE, Time Slot IE*], [1.28Mcps TDD - *DL/UL Code Information LCR IE, Midamble Shift LCR IE, Time Slot LCR IE*], TDD Physical Channel Offset IE, Repetition Period IE, Repetition Length IE, or TFCI Presence IE, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - PDSCH/PUSCH Deletion]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be deleted the Node B shall delete these sets from its PDSCH/PUSCH configuration.]

Response Message:

HS-DSCH/HS-SCCH Resources:

In the successful case involving HS-PDSCH or HS-SCCH resources, the Node B shall store the value of *Configuration Generation ID* IE and it shall make these resources available to all the current and future HS-DSCH transport channels; and shall respond with PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.

[TDD - PDSCH/PUSCH Addition/Modification/Deletion]:

[TDD - In the successful case involving PDSCH/PUSCH addition, modification or deletion, the Node B shall add, modify and delete the PDSCH Sets and PUSCH Sets in the Common Transport Channel data base, as requested in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, and shall make these available to all the current and future DSCH and USCH transport channels. The Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.]

8.2.18.3 Unsuccessful Operation

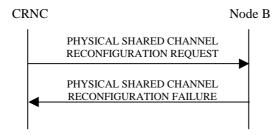


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Opreration

If the Node B is not able to support all parts of the configuration, it shall reject the configuration of all the channels in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message. The *Cause* IE shall be set to an appropriate value [TDD - either a single general cause value or PDSCH and PUSCH set specific cause values for each set that caused a failure within the *Unsuccessful DL Shared Channel Set* IE for PDSCH sets or *Unsuccessful UL Shared Channel Set* IE for PUSCH sets]. The *Configuration Generation ID* shall not be changed in the Node B.

If the configuration was unsuccessful, the Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message:

Typical cause values are as follows:

Radio Network Layer Cause:

- Cell not available
- Node B Resources unavailable

Transport Layer Cause:

- Transport Resources Unavailable

Miscellaneous Cause:

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

8.2.18.4 Abnormal Conditions

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains *Add to HS-SCCH Resource Pool* IE, the *Modify HS-SCCH Resource Pool* IE, or the *Delete from HS-SCCH Resource Pool* IE and does not contain the *Configuration Generation ID* the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the the *Configuration Generation ID* IE and does not contain at least one of *Add to HS-SCCH Resource Pool* IE, the *Modify HS-SCCH Resource Pool* IE, or the *Delete from HS-SCCH Resource Pool* IE the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

8.2.19 Reset

8.2.19.1 General

The purpose of the Reset procedure is to align the resources in the CRNC and the Node B in the event of an abnormal failure. The CRNC or the Node B may initiate the procedure.

8.2.19.2 Successful Operation

8.2.19.2.1 Reset Initiated by the CRNC

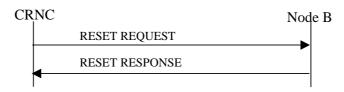


Figure 27A Reset procedure (CRNC to Node B), Successful Operation

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

If the *Reset Indicator* IE is set to "Communication Context", the Node B shall remove all the indicated Node B Communication Contexts (identified by a *Node B Communication Context ID* or a *CRNC Communication Context ID* IE) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Communication Control Port", the Node B shall remove all the Node B Communication Controlled via the indicated Communication Control Port(s) and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

If the *Reset Indicator* IE is set to "Node B", the Node B shall remove all the Node B Communication Contexts within the Node B and all the radio resources allocated for these Node B Communication Contexts. The Node B shall also initiate release of the user plane transport bearers that were involved in these Contexts. After clearing all related resources, the Node B shall return the RESET RESPONSE message to the CRNC.

8.2.19.2.2 Reset Initiated by the Node B

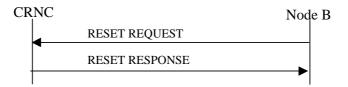


Figure 27B Reset procedure (Node B to CRNC), Successful Operation

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

If the *Reset Indicator* IE is set to "Communication Context", for all indicated CRNC Communication Contexts (indicated by a *CRNC Communication Context ID* or a *Node B Communication Context ID* IE), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the indicated CRNC Communication Contexts. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to the Node B.

If the *Reset Indicator* IE is set to "Communication Control Port", for all the CRNC Communication Contexts controlled via the indicated Communication Control Port(s), the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC Communication Contexts controlled via the indicated Communication Control Port(s). After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

If the *Reset Indicator* IE is set to the "Node B", for all the CRNC Communication Contexts related to this Node B, the CRNC shall remove the information related to this Node B and all the radio resources allocated in the CRNC. The CRNC shall also initiate release of the user plane transport bearers towards the Node B involved in the CRNC Communication Contexts related to this Node B. After clearing all related resources, the CRNC shall return the RESET RESPONSE message to Node B.

8.2.19.3 Unsuccessful Operation

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8.2.19.4 Abnormal Conditions

If the RESET REQUEST message is received any ongoing procedure related to a CRNC Communication Context in the CRNC or Node B Communication Context in the Node B indicated (explicitly or implicitly) in the message shall be aborted.

8.2.20 Cell Synchronisation Initiation [TDD]

8.2.20.1 General

This procedure is used by a CRNC to request the transmission of [3.84Mcps TDD - Cell Synchronisation Bursts sent in the PRACH time slots] [1.28Mcps TDD - SYNC_DL code sent in the DwPTS] and/or to start measurements on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL code] in a Node B.

8.2.20.2 Successful Operation

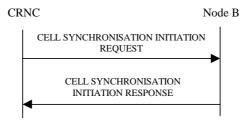


Figure 27C Cell Synchronisation Initiation procedure, Successful Operation

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

Upon reception, the Node B shall initiate the requested transmission according to the parameters given in the request and start the measurement on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL code] if requested.

[3.84Mcps TDD - Cell Sync Burst Transmission Initiation] [1.28Mcps TDD - SYNC_DL Code Transmission Initiation LCR]:

When the [3.84Mcps TDD - Cell Sync Burst Transmission Initiation Information] [1.28Mcps TDD - SYNC_DL Code Transmission Initiation Information LCR] is present, the Node B shall configure the transmission of the cell synchronisation burst according to the parameters given in the CELL SYNCHRONISATION INITIATION REQUEST message. The *SFN* IE indicates the frame number when the cell shall start transmitting cell synchronisation bursts.

[3.84Mcps TDD - When the Cell Sync Burst Transmission Initiation Information is present and the "Frequency Acquisition" is indicated within the *Synchronisation Report Type* IE, the Node B shall first perform only frequency locking on received cell synchronisation bursts. Transmission of the indicated cell synchronisation bursts shall be started only if the frequency locking is performed successfully and "Frequency Acquisition completed" is reported to the RNC.]

[3.84Mcps TDD - Cell Sync Burst Measurement characteristics] [1.28Mcps TDD - SYNC_DL Code Measurement characteristics LCR]:

When the [3.84Mcps TDD - Cell Sync Burst Measurement Initiation Information][1.28Mcps TDD – SYNC_DL Code Measurement Initiation Information LCR] is present, the Node B shall initiate measurements on the indicated cell synchronisation burst.

If the *SFN* IE is present, the Node B shall after measurement of the indicated [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] adjust the frame number of the indicated cell according to the SFN of the CELL SYNCHRONISATION INITIATION REQUEST message. This adjustment shall only apply to the late entrant cell at the late entrant phase.

Synchronisation Report characteristics:

The *Synchronisation Report Characteristics* IE indicates how the reporting of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] measurement shall be performed. Whenever the Cell Synchronisation Initiation procedure is initiated, only [3.84Mcps TDD - the "Frequency Acquisition completed" or] "Frame related" report characteristics type shall apply.

[3.84Mcps TDD - If the *Synchronisation Report characteristics type* IE is set to "Frequency Acquisition completed", the Node B shall signal completion of frequency acquisition to the RNC when locking is completed.]

If the *Synchronisation Report characteristics type* IE is set to "Frame related", the Node B shall report the result of the cell synchronisation burst measurement after every measured frame.

[3.84Mcps TDD - If the *Cell Sync Burst Arrival Time* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, it indicates to the Node B the reference time at which the reception of the cell synchronisation burst of a neighbouring cell is expected.]

[3.84Mcps TDD - If the *Cell Sync Burst Timing Threshold* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, the Node B shall use this threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

[1.28Mcps TDD - If the SYNC_DL Code ID Arrival Time IE is included in the SYNC_DL Code Information LCR IE of the Synchronisation Report Characteristics IE, it indicates to the Node B the reference time at which the reception of the SYNC_DL Code of a neighbouring cell is expected.]

[1.28Mcps TDD - If the SYNC_DL Code ID Timing Threshold IE is included in the SYNC_DL Code Information LCR IE of the Synchronisation Report Characteristics IE, the Node B shall use this threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

Response message:

If the Node B was able to initiate the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] transmission and/or measurement requested by the CRNC it shall respond with the CELL SYNCHRONISATION INITIATION RESPONSE message sent over the Node B Control Port.

8.2.20.3 Unsuccessful Operation

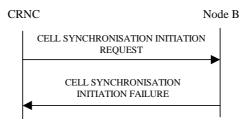


Figure 27D Cell Synchronisation Initiation procedure, Unsuccessful Operation

If the requested transmission or measurement on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL Code] cannot be initiated, the Node B shall send a CELL SYNCHRONISATION INITIATION FAILURE message over the Node B control port. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause:

- Cell Synchronisation not supported
- Power level not supported
- Measurement Temporarily not Available
- Frequency Acquisition not supported

Miscellaneous Cause:

- O&M Intervention
- HW failure

8.2.20.4 Abnormal Conditions

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8.2.21 Cell Synchronisation Reconfiguration [TDD]

8.2.21.1 General

This procedure is used by a CRNC to reconfigure the transmission of [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL Code] and/or to reconfigure measurements on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL Code] in a Node B.

8.2.21.2 Successful Operation

8.2.21.2.1 General

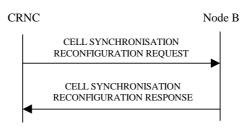


Figure 27E Cell Synchronisation Reconfiguration procedure, Successful Operation

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

Upon reception, the Node B shall reconfigure the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] transmission and/or measurements according to the parameters given in the request.

8.2.21.2.2 [3.84Mcps TDD - Cell Sync Burst Schedule]

Within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message first the schedule for the steady state phase is fixed. I.e. the number of cycles per SFN period is defined with the same schedule. For each cycle, the number of repetitions is defined according to following equations:

Cycle length: 4096 / value of Number Of Cycles Per SFN Period IE

Repetition period: Cycle length / value of Number Of Repetitions Per Cycle Period IE

Cell Sync Frame number is calculated by:

SFN = floor((k-1) * Cycle length + (i-1)* Repetition period)

 $k = \{1, 2, 3, ... \text{ Number of cycle per SFN period}\}$

 $i = \{1, 2, 3, ... \text{ Cell Sync Frame number within cycle period}\}$

8.2.21.2.3 [1.28Mcps TDD - SYNC_DL Code Schedule]

Within the CELL SYNCHRONISATION RECONFIGURATION REQUEST message first the schedule for the steady state phase is fixed. The "schedule" includes

- the list of frame numbers SFN within the SFN period where SYNC_DL Code transmission or reception takes place, i.e. the "synchronisation frames", and
- the associated actions (SYNC_DL Code transmission, reception, averaging, reporting etc) to be performed for synchronisation purpose by the Node B at each of these SFNs.

Within the synchronisation frames, only the first subframe shall be used for sending or receiving a SYNC_DL Code in the DwPTS while in the second subframe, normal operation continues.

The synchronisation schedule includes the option of averaging of measured correlation results within the Node B over a sequence of measurements, for increasing the reliability of the Time of Arrival measurement obtained from the correlation results. For this purpose, the concept of "subcycles" has been introduced: Each Synchronisation Cycle is devided into "subcycles" where in each subcycle, the same set of SYNC_DL transmissions and receptions is performed, and averaging takes place over all the subcycles within a Synchronisation Cycle. Since the list of actions (transmission, measurements etc) is the same in each subcycle, and the subcycles are repeated to make up a cycle, and the cycles make up an SFN period, the full list of actions is derived by the actions specified for a subcycle.

The full list of SFNs which make up the synchronisation schedule within the SFN period are calculated in Node B and CRNC autonomously based on the following parameters included in the CELL SYNCHRONISATION

RECONFIGURATION REQUEST message: "Number of cycles per SFN period", "Number of subcycles per cycle period", and "Number of repetitions per cycles period", along the following equations:

Cycle length: 4096 / value of Number Of Cycles Per SFN Period IE

Subcycle length: Cycle length / value of Number Of Subcycles Per Cycle Period IE

Repetition period: Subcycle length / value of Number Of Repetitions Per Cycle Period IE

SFN = floor((k-1) * Cycle length + (j-1)*Subcycle length + (i-1)* Repetition period)

 $k = \{1, 2, 3, ... \text{ Number of cycle per SFN period}\}$

 $j = \{1, 2, 3, ... \text{ Number of subcycles per cycle}\}$

 $i = \{1, 2, 3, ...$ Number of repetitions per cycle period $\}$

Note that if the *Number Of Subcycles Per Cycle* IE is equal to 1, then the subcycles are identical to the "Synchronisation Cycles".

If the *Number Of Subcycles Per Cycle* IE is included in the CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD] message, then the Node B shall apply this number for dividing the Synchronisation Cycles in Subcycles. If the IE is not present, then the Node B shall assume that there is one subcycle per synchronisation cycle only, which is identical to the synchronisation cycle.

Averaging is performed as follows:

- From each SYNC_DL code being received according to the schedule, the Node B shall calculate a "correlation function" by matching the received data with the respective expected code.
- Therefore the set of measurements within one subcycle provides a set of "correlation functions".
- The set of correlation functions of the first subcycle within a synchronisation cycle is stored in an averaging memory.
- The sets of correlation functions of the subsequent subcycles within a synchronisation cycle are combined with the available contents of the "averaging memory", to produce an average over all the sets of correlation functions within a synchronisation cycle.
- At the end of a synchronisation cycle, the Time-of-Arrival measurements for that synchronisation cycle are obtained by evaluating the final set of correlation functions.

These Time-of-Arrival measurements, together with associated SIR values obtained from the averaged correlation functions, are included in a Measurement Report to the CRNC, according to a measurement reporting plan.

In addition, the Time-of-Arrival measurements may optionally be used for autonomous self-adjustment of the timing of the respective cell.

8.2.21.2.4 [3.84Mcps TDD - Cell Sync Burst Transmission Reconfiguration] [1.28Mcps TDD - SYNC DL Code Transmission Reconfiguration]

When the [3.84Mcps TDD - Cell Sync Burst Transmission Reconfiguration Information] [1.28Mcps TDD - SYNC_DL Code Transmission Reconfiguration Information LCR] is present, the Node B shall reconfigure the transmission of the [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - SYNC_DL Code] according to the parameters given in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message.

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code* IE, the Node B shall reconfigure the synchronisation code in the cell according to the *Cell Sync Burst Code* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Cell Sync Burst Code Shift* IE, the Node B shall reconfigure the synchronisation code shift in the cell according to the *Cell Sync Burst Code Shift* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *DL Transmission Power* IE, the Node B shall reconfigure the DL transmission power of the cell synchronisation burst in the cell according to the *DL Transmission Power* IE value.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *DwPCH Power* IE, the Node B shall store the DwPCH power according to the *DwPCH Power* IE value. For the duration of those subsequent transmissions of the DwPCH which are specifically for the purpose of Node B synchronisation the power of the DwPCH shall be set to the stored power. During subsequent transmissions of the DwPCH which are for normal operation the power of the DwPCH shall assume its normal level.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the *Sync_DL Code ID* IE, the Node B shall reconfigure the SYNC_DL Code in the cell according to the *Sync_DL Code ID* IE value.]

8.2.21.2.5 [3.84Mcps TDD - Cell Sync Burst Measurement Reconfiguration] [1.28Mcps TDD - SYNC_DL Code Measurement Reconfiguration]

When the [3.84Mcps TDD - Cell Sync Burst Measurement Reconfiguration Information] [1.28Mcps TDD - Cell SYNC_DL Code Measurement Reconfiguration Information LCR] is present, the Node B shall reconfigure the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] measurements according the parameters given in the message.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the [3.84Mcps TDD -Cell Sync Burst Measurement Information] [1.28Mcps TDD – SYNC_DL Code Measurement Information LCR], the measurements shall apply on the individual [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL Codes] on the requested Sync Frame number.

[1.28Mcps TDD - When the *Propagation Delay Compensation* IE is present in the SYNC_DL Code Measurement Information LCR, the Node B shall, if supported, perform the following functions: (1) use the respective SYNC_DL measurement (after potential averaging) to perform the self-adjustment of the respective cell"s timing at the end of a Synchronisation Cycle; (2) include the *Accumulated Clock Update* IE in the CELL SYNCHRONISATION REPORT message, to report the total accumulated amount of timing adjustments since the last report to the RNC. This Accumulated Clock Update value shall also include the adjustments which may have been performed by explicit order from the CRNC in the CELL SYNCHRONISATION ADJUSTMENT REQUEST message. The times for self-adjustment at the end of a synchronisation cycle shall be independent from the measurement reporting characteristics; the Accumulated Adjustment values shall be included in the CELL SYNCHRONISATION REPORT messages without influencing the frequency of measurement reporting.]

If the *Synchronisation Report Type* IE is provided, the measurement reporting shall apply according the parameter given in the message.

Synchronisation Report characteristics:

The *Synchronisation Report Characteristics* IE indicates how the reporting of the cell synchronisation burst measurement shall be performed.

If the *Synchronisation Report Characteristics Type* IE is set to "Frame related", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] measurement after every measured frame.

If the *Synchronisation Report Characteristics Type* IE is set to "SFN period related", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD – SYNC_DL Code] measurements after every SFN period.

If the *Synchronisation Report Characteristics Type* IE is set to "Cycle length related", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD – SYNC_DL Code] measurements after every cycle length within the SFN period.

If the *Synchronisation Report Characteristics Type* IE is set to "Threshold exceeding", the Node B shall report the result of the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] measurement when the [3.84Mcps TDD - Cell Synchronisation Burst timing] [1.28Mcps TDD - SYNC_DL Code timing] rises or falls more than the requested threshold value compared to the arrival time in synchronised state which is represented by the [3.84Mcps TDD - *Cell Sync Burst Arrival Time* IE] [1.28Mcps TDD - *SYNC_DL Code ID Arrival Time* IE].

[3.84Mcps TDD - If the *Cell Sync Burst Arrival Time* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, it indicates to the Node B the reference time at which the reception of the cell synchronisation burst of a neighbouring cell is expected.]

[3.84Mcps TDD - If the *Cell Sync Burst Timing Threshold* IE is included in the *Cell Sync Burst Information* IE of the *Synchronisation Report Characteristics* IE, the Node B shall use this new threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

[1.28Mcps TDD - If the SYNC_DL Code ID Arrival Time IE is included in the SYNC_DL Code Information LCR IE of the Synchronisation Report Characteristics IE, it indicates to the Node B the reference time at which the reception of the SYNC_DL Code of a neighbouring cell is expected.]

[1.28Mcps TDD - If the *SYNC_DL Code ID Timing Threshold* IE is included in the *SYNC_DL Code Information LCR* IE of the *Synchronisation Report Characteristics* IE, the Node B shall use this threshold as a trigger for the CELL SYNCHRONISATION REPORT message.]

Response message:

If the Node B was able to reconfigure the [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD – SYNC_DL Code] transmission and/or measurement requested by the CRNC, it shall respond with the CELL SYNCHRONISATION RECONFIGURATION RESPONSE message sent over the Node B Control Port.

8.2.21.3 Unsuccessful Operation

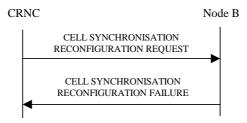


Figure 27F Cell Synchronisation Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot reconfigure the requested transmission or measurement on [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code], the CELL SYNCHRONISATION RECONFIGURATION FAILURE message shall be sent to the CRNC. The message shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause:

- Cell Synchronisation not supported
- Power level not supported
- Measurement Temporarily not Available

Miscellaneous Cause:

- O&M Intervention
- HW failure

8.2.21.4 Abnormal Conditions

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8.2.22 Cell Synchronisation Reporting [TDD]

8.2.22.1 General

This procedure is used by a Node B to report the result of [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] measurements requested by the CRNC with the Cell Synchronisation Initiation or Cell Synchronisation Reconfiguration procedure.

8.2.22.2 Successful Operation



Figure 27G Cell Synchronisation Reporting procedure, Successful Operation

If the requested synchronisation measurement reporting criteria are met, the Node B shall initiate a Cell Synchronisation Reporting procedure. The CELL SYNCHRONISATION REPORT message shall use the Node B Control Port.

In the steady state phase when several [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL Codes] shall be measured per Sync Frame number, the sequence of the reported measured values shall be the same as defined in the Cell Synchronisation Reconfiguration procedure.

[1.28Mcps TDD - The Node B shall, if supported, include the *Accumulated Clock Update* IE in the CELL SYNCHRONISATION REPORT message whenever the CRNC has included at least one instance of the *Propagation Delay Compensation* IE in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message. The *Accumulated Clock Update* IE shall include the accumulated timing adjustment which has been done as commanded by the CRNC, as well as by self-adjustment, since the last *Accumulated Clock Update* IE report.]

If the achieved measurement accuracy does not fulfil the given accuracy requirement defined in [23], the Cell Sync Burst not available shall be reported.

8.2.22.3 Abnormal Conditions

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8.2.23 Cell Synchronisation Termination [TDD]

8.2.23.1 General

This procedure is used by the CRNC to terminate a [3.84Mcps TDD - Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] transmission or measurement previously requested by the Cell Synchronisation Initiation procedure or Cell Synchronisation Reconfiguration procedure.

8.2.23.2 Successful Operation



Figure 27H Cell Synchronisation Termination procedure, Successful Operation

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

Upon reception, the Node B shall terminate [3.84Mcps TDD - transmission of Cell Synchronisation Bursts or reporting of Cell Synchronisation Burst measurements] [1.28Mcps TDD - transmission of SYNC_DL Codes or reporting of SYNC_DL Code measurements] corresponding to the *CSB Transmission ID* IE or *CSB Measurement ID* IE.

8.2.23.3 Abnormal Conditions

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8.2.24 Cell Synchronisation Failure [TDD]

8.2.24.1 General

This procedure is used by the Node B to notify the CRNC that a [3.84Mcps TDD – Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] transmission or synchronisation measurement procedure can no longer be supported.

8.2.24.2 Successful Operation

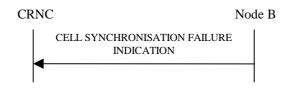


Figure 27I Cell Synchronisation Failure procedure, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION FAILURE INDICATION message, sent from the Node B to the CRNC using the Node B Control Port, to inform the CRNC that a previously requested transmission or measurement on [3.84Mcps TDD - Cell Synchronisation Bursts] [1.28Mcps TDD - SYNC_DL Codes] can no longer be supported.

If the transmission of a [3.84Mcps TDD – Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] has failed, then the Node B shall include the *CSB Transmission ID* IE in the CELL SYNCHRONISATION FAILURE INDICATION message to uniquely identify the concerned [3.84Mcps TDD – Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] Transmission.

If the measurement of a [3.84Mcps TDD – Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] has failed, then the Node B shall include the *CSB Measurement ID* IE in the CELL SYNCHRONISATION FAILURE INDICATION message to uniquely identify the concerned [3.84Mcps TDD – Cell Synchronisation Burst] [1.28Mcps TDD - SYNC_DL Code] Measurement.

8.2.24.3 Abnormal Conditions

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8.2.25 Cell Synchronisation Adjustment [TDD]

8.2.25.1 General

The purpose of Cell Synchronisation Adjustment procedure is to allow the CRNC to adjust the timing of the radio transmission of a cell within a Node B for time alignment.

8.2.25.2 Successful Operation

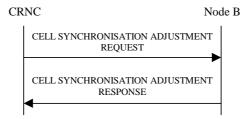


Figure 27J Cell Synchronisation Adjustment, Successful Operation

This procedure is initiated with a CELL SYNCHRONISATION ADJUSTMENT REQUEST message sent by the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B adjusts its timing according to the parameters given in the message.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Frame Adjustment Value* IE the Node B shall apply the frame adjustment in the cell according to the *Frame Adjustment Value* IE value.

[3.84Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Timing Adjustment Value* IE the Node B shall apply the timing adjustment in the cell according to the *Timing Adjustment Value* IE value.]

[1.28Mcps TDD – If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *Timing Adjustment Value LCR* IE the Node B shall apply the timing adjustment in the cell according to the *Timing Adjustment Value LCR* IE value.]

[3.84Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DL Transmission Power* IE, the Node B shall apply the transmission power of the Cell Synchronisation Burst according to the *DL Transmission Power* IE value.]

[1.28Mcps TDD - If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DwPCH Power* IE, the Node B shall store the DwPCH power according to the *DwPCH Power* IE value. For the duration of those subsequent transmissions of the DwPCH which are specifically for the purpose of Node B synchronisation the power of the DwPCH shall be set to the stored power. During subsequent transmissions of the DwPCH which are for normal operation the power of the DwPCH shall assume its normal level.]

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *SFN* IE, the Node B shall apply the synchronisation adjustment starting with the SFN number indicated in the message.

When the cell synchronisation adjustment is successfully done by the Node B, the Node B shall respond with a CELL SYNCHRONISATION ADJUSTMENT RESPONSE message.

8.2.25.3 Unsuccessful Operation

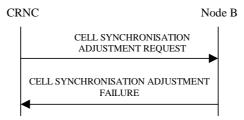


Figure 27K Cell Synchronisation Adjustment, Unsuccessful Operation

If the Node B cannot perform the indicated cell synchronisation adjustment due to hardware failure or other problem it shall send the CELL SYNCHRONISATION ADJUSTMENT FAILURE as a response.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell Synchronisation Adjustment not supported

- Power level not supported

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.25.4 Abnormal Conditions

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8.2.26 Information Exchange Initiation

8.2.26.1 General

This procedure is used by a CRNC to request the initiation of information provisioning from a Node B.

8.2.26.2 Successful Operation

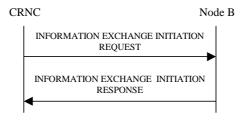


Figure 27L: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with the INFORMATION EXCHANGE INITIATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall provide the requested information according to the *Information Type Item* IE. Unless specified below, the meaning of the parameters are given in other specifications.

Information Report Characteristics

The Information Report Characteristics IE indicates how the reporting of the information shall be performed.

If the *Information Report Characteristics* IE is set to "On Demand", the Node B shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to "Periodic", the Node B shall immediately report the requested information and then shall periodically initiate the Information Reporting procedure for all the requested information, with the requested reporting frequency.

If the *Information Report Characteristics* IE is set to "On Modification", the Node B shall immediately report the requested information if available. If the requested information is not available at the moment of receiving the INFORMATION EXCHANGE INITIATION REQUEST message, but expected to become available after some acquisition time, the Node B shall initiate the Information Reporting procedure when the requested information becomes available. The Node B shall then initiate the Information Reporting procedure in accordance to the following conditions related to the *Information Type* IE:

- 1) If the *Information Type Item* IE is set to "DGPS Corrections", the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE in the *Information Threshold* IE or a change has occurred in the IODE.
- 2) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Navigation Model & Time Recovery", the Node B shall initiate the Information Reporting procedure for this

specific GPS Information Item when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *Sat ID* IEs.

- 3) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Ionospheric Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 4) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS UTC Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the t_{ot} or WN_t parameter.
- 5) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change in the t_{oa} or WN_a parameter has occurred.
- 6) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 7) If any of the above *Information Type* IEs becomes temporarily unavailable, the Node B shall initiate the Information Reporting procedure for this specific Information Item by indicating "Information Not Available" in the *Requested Data Value Information* IE. If the Information becomes available again, the Node B shall initiate the Information Reporting procedure for this specific Information.

Response message

If the Node B is able to initiate the information provision requested by the CRNC, it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message sent over the Node B Control Port. The message shall include the same Information Exchange ID that was included in the INFORMATION EXCHANGE INITIATION REQUEST message. When the *Report Characteristics* IE is set to "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the requested data if the data are available. When the *Report Characteristics* IE is set to "On Demand", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the *Requested Data Value* IE.

8.2.26.3 Unsuccessful Operation

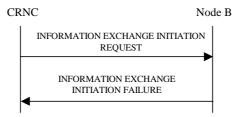


Figure 27M: Information Exchange Initiation procedure, Unsuccessful Operation

If the Information Type Item received in the *Information Type Item* IE indicates a type of information that cannot be provided, the Node B shall regard the Information Exchange Initiation procedure as failed.

If the requested information provision cannot be initiated, the Node B shall send the INFORMATION EXCHANGE INITIATION FAILURE message over the Node B control port. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Information temporarily not available.
- Information Provision not supported for the object.

8.2.26.4 Abnormal Conditions

If the *Information Report Characteristics* IE is set to "On Modification", and the *Information Type Item* IE is set to "DGPS Corrections", but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the Node B shall regard the Information Exchange Initiation procedure as failed.

If the *Information Type Item* IE is not set to "DGPS Correction", the *Information Report Characteristics* IE is set to "On Modification" and the *Information Threshold* IE is included in the INFORMATION EXCHANGE INITIATION REQUEST message, the Node B shall regard the Information Exchange Initiation procedure as failed.

8.2.27 Information Reporting

8.2.27.1 General

This procedure is used by a Node B to report the information requested by the CRNC with the Information Exchange Initiation procedure.

8.2.27.2 Successful Operation



Figure 27N: Information Reporting procedure, Successful Operation

If the requested information reporting criteria are met, the Node B shall initiate the Information Reporting procedure. The INFORMATION REPORT message shall use the Node B Control Port. Unless specified below, the meaning of the parameters are given in other specifications.

The *Information Exchange ID* IE shall be set to the Information Exchange ID provided by the CRNC when initiating the Information Exchange with the Information Exchange Initiation procedure.

The Requested Data Value IE shall include at least one IE containing the data to be reported.

8.2.27.3 Abnormal Conditions

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8.2.28 Information Exchange Termination

8.2.28.1 General

This procedure is used by the CRNC to terminate the provision of information previously requested by the Information Exchange Initiation procedure.

8.2.28.2 Successful Operation



Figure 270: Information Exchange Termination procedure, Successful Operation

This procedure is initiated with an INFORMATION EXCHANGE TERMINATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall terminate the provision of information corresponding to the Information Exchange ID.

8.2.28.3 Abnormal Conditions

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8.2.29 Information Exchange Failure

8.2.29.1 General

This procedure is used by the Node B to notify the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported.

8.2.29.2 Successful Operation



Figure 27P: Information Exchange Failure procedure, Successful Operation

This procedure is initiated with the INFORMATION EXCHANGE FAILURE INDICATION message sent from the Node B to the CRNC using the Node B Control Port to inform the CRNC that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

8.2.30 MBMS Notification Update

8.2.30.1 General

This procedure is used to update the MBMS Notification Indicators to be sent over the MICH.

8.2.30.2 Successful Operation



Figure 27Q: MBMS Notification Update procedure, Successful Operation

The procedure is initiated with an MBMS NOTIFICATION UPDATE COMMAND message sent from the CRNC to the Node B using the Node B Control Port.

The Node B shall use the different NIs in the *NI Information* IE to generate, as specified in ref. [7], the notification indicators it shall transmit on the MICH starting at the next coming MICH CFN equal to the value in the *MICH CFN* IE and for a duration equal to the Modification Period.

If the *Modification Period* IE is included in the MBMS NOTIFICATION UPDATE COMMAND message, the Node B shall use this as the new Modification Period starting at the next coming MICH CFN equal to the value in the *MICH CFN* IE.

8.2.30.3 Abnormal Conditions

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8.3 NBAP Dedicated Procedures

8.3.1 Radio Link Addition

8.3.1.1 General

This procedure is used for establishing the necessary resources in the Node B for one or more additional RLs towards a UE when there is already a Node B Communication Context for this UE in the Node B.

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

8.3.1.2 Successful Operation

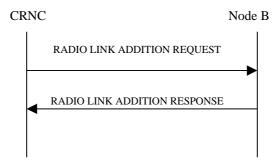


Figure: 28 Radio Link Addition procedure, Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

Physical Channels Handling:

[TDD – If the [3.84Mcps TDD - *UL DPCH Information IE*] [1.28Mcps TDD - *UL DPCH Information LCR IE*] is present, the Node B shall configure the new UL DPCH(s) according to the parameters given in the message.]

[TDD – If the [3.84Mcps TDD - *DL DPCH Information IE*] [1.28Mcps TDD - *DL DPCH Information LCR IE*] is present, the Node B shall configure the new DL DPCH(s) according to the parameters given in the message.]

[FDD - Compressed Mode]:

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Compressed Mode Deactivation Flag* IE with value "Deactivate", the Node B shall not activate any compressed mode pattern in the new RLs. In all the other cases (Flag set to "Maintain Active" or not present), the ongoing compressed mode (if existing) shall be applied also to the added RLs.]

[FDD- If the Node B Communication Context is configured to use DPCH in the downlink and if the RADIO LINK ADDITION REQUEST message contains the *Transmission Gap Pattern Sequence Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated for each DL Channelisation Code for which the *Transmission Gap Pattern Sequence Code Information* IE is set to "Code Change".]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to ref. [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *pth* to "*PhCH number p*".]

[TDD – CCTrCH Handling]:

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

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

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

[TDD - If the *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE, the Node B shall configure the downlink TPC step size according to the parameters given in the message, otherwise it shall use the step size configured in other radio link.]

[FDD – Phase Reference Handling]:

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

Radio Link Handling:

Diversity Combination Control:

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

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

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

When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with.

In the case of not combining a RL with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or a RL previously listed in the RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK

ADDITION RESPONSE message that no combining is done. In this case, the Node B shall include in the *DCH Information Response* IE both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message.

In the case of combining with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that the RL is combined. 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.

In the case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be included for only one of the DCHs in a set of coordinated DCHs.

[TDD – The Node B shall include in the RADIO LINK ADDITION RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH and USCH.]

[FDD – Transmit Diversity]:

[FDD – If the *Transmit Diversity Indicator* IE is included in the RADIO LINK ADDITION REQUEST message, the Node B shall activate/deactivate the Transmit Diversity for each new Radio Link in accordance with the *Transmit Diversity Indicator* IE and the already known diversity mode.]

DL Power Control:

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DL DPCH or on the F-DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or Power Balancing is activated. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing RLs for this Node B Communication Context. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE currently configured for the relevant Node B Communication Context and the downlink power control procedure (see subclause 8.3.7).]

[3.84 Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the initial DL power and ignore the *DL Time Slot ISCP info LCR*, otherwise the initial DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specifiedin [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing RL/timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall store this value and not transmit with a higher power on any DL DPCH or on the F-DPCH of the RL. If no *Maximum DL Power* IE is included, any Maximum DL power stored for already existing RLs for this Node B Communication Contextshall be applied. If the Node B Communication Context is configured to use DPCH in the downlink, during compressed mode, the δP_{curr} , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall store this value and never transmit with a lower power on any DL DPCH or on the F-DPCH of the RL. If no *Minimum DL Power* IE is included, any Minimum DL power stored for already existing RLs for this Node B Communication Context shall be applied.]

[3.84 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall determine the maximum CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum CCTrCH DL power, otherwise the maximum CCTrCH DL power is the *Maximum DL Power* IE included in the *RL Information* IE. If no *Maximum DL Power* IE is included (even if *CCTrCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

[3.84 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall determine the minimum CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum CCTrCH DL power, otherwise the minimum CCTrCH DL power is the *Minimum DL Power* IE included in the *RL Information* IE. If no *Minimum DL Power* IE is included (even if *CCTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall determine the maximum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum DL Power* IE is included, any maximum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall determine the minimum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum DL Power* IE is included, any minimum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

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

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

[1.28 Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot within a DSCH type CCTrCH by the following rule: If both the *CCTrCH Initial DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, and the *DL Time Slot ISCP Info LCR* IE, included in the *RL Information* IE, are included then the Node B shall use that power for the PDSCH and ignore the *Initial DL Transmission Power* IE included in the *RL Information* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE

included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each DL PDSCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing RL/timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable PDSCH. If no *Maximum DL Power* IE is included, any maximum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable PDSCH. If no *Minimum DL Power* IE is included, any minimum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

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

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Individual" in the existing RL(s) and the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power* IE, the Node B shall activate the power balancing and use the *DL Reference Power* IE for the power balancing procedure in the new RL(s), if activation of power balancing by the RADIO LINK ADDITION REQUEST message is supported, according to subclause 8.3.7. In this case, the Node B shall include the *DL Power Balancing Activation Indicator* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e. P_{init} shall be set to the power level indicated by the *Initial DL Transmission Power* IE (if received) or the decided DL TX power level on each DL channelisation code of a RL based on power level of existing RLs.]

[1.28Mcps TDD – Uplink Synchronisation Parameters LCR]:

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

General:

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

[FDD – If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, the Node B shall activate SSDT, if supported, for the concerned new RL, with the indicated SSDT cell identity used for that RL.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Qth Parameter* IE in addition to the *SSDT Cell Identity* IE, the Node B shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated in the concerned new RL.]

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

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

[FDD – Radio Link Set Handling]:

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication Context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication Context.]

[FDD – After addition of the new RL(s), the UL out-of-sync algorithm defined in [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD - E-DCH]:

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *E-DCH RL Indication* IE in the *RL Information* IE, then for every such RL:]

- [FDD The Node B shall setup the E-DCH resources as configured in the Node B Communication Context.]
- [FDD The Node B shall include the E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE, the E-RGCH/E-HICH Channelisation Code IE and the corresponding SequenceNumber IEs in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK ADDITION RESPONSE message.]

Response Message:

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

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

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

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

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

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

[TDD – start transmission on the new RL at the CFN indicated in the Activation CFN IE as specified in [16].]

8.3.1.3 Unsuccessful Operation

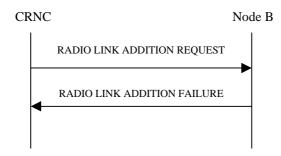


Figure 29: Radio Link Addition procedure: Unsuccessful Operation

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

[FDD - If some RL(s) were established successfully, the Node B shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.]

[FDD – If the RADIO LINK ADDITION REQUEST contains a *C-ID* IE indicating that a Radio Link must be established on a Cell where DPC Mode change is not supported and DPC Mode can be changed for the relevant Node B Communication Context, the Node B shall consider the procedure as failed for the concerned Radio Link and shall respond with a RADIO LINK ADDITION FAILURE with the appropriate cause value ("DPC Mode change not supported").]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Reconfiguration CFN not elapsed
- CM not supported
- [FDD DPC Mode change not supported]
- Delayed Activation not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

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

8.3.1.4 Abnormal conditions

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Compressed Mode Deactivation Flag* IE with the value "Deactivate" when compressed mode is active for the existing RL(s), and at least one of the new RL is added in a cell that has the same UARFCN (both UL and DL) of at least one cell with an already existing RL, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM settings".]

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Individual" in the existing RL(s) and if the *DL Reference Power* IEs are included in the *RL Information* IE but the *DL Reference Power* IE is not present for each RL in the *RL Information* IE, the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power* IEs in the *RL Information* IE but the power balancing is not active in the existing RL(s) or the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s), the Node B shall regard the Radio Link Addition procedure as failed and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must", the Node B shall regard the Radio Link Addition procedure as failed and respond with the RADIO LINK ADDITION FAILURE message.

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

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink, if at least one Transmission Gap Pattern Sequence is configured with an SF/2 downlink compressed mode method in the Compressed Mode Configuration and if the RADIO LINK ADDITION REQUEST message includes the *Transmission Gap Pattern Sequence Code Information* IE for any DL Channelisation Code, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

8.3.2 Synchronised Radio Link Reconfiguration Preparation

8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one Node B Communication Context.

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

8.3.2.2 Successful Operation

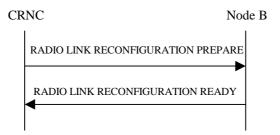


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Modify* IE then the Node B shall treat them each as follows:

- If the *DCHs To Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply in the uplink for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of coordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

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

- If the *DCHs To Add* IE includes multiple *DCH Specific Info* IEs, the Node B shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.

- [TDD If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- [FDD For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Delete* IE, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]

- [FDD If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink in the old configuration, the Node B shall configure the concerned Node B Communication Context to use DPCH in the downlink in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Power Information* IE, the Node B shall use the information contained in it for the power settings of the DL DPCH. In particular, if the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLs according to ref. [10].]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE, the Node B shall apply the parameters to the new configuration as follows:]

- [FDD The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *DL DPCH Slot Format* IE, the Node B shall set the new Downlink DPCH Structure to the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *PDSCH Code Mapping* IE, then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE, then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *F-DPCH Information* IE, the Node B shall configure the concerned Node B Communication Context to use F-DPCH in the downlink in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD - E-DPCH Handling]:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DPCH Information* IE, the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *E-DPCH Information* IE includes the *Min UL Channelisation Code Length For EDCH FDD* IE, the Node B shall apply the new Min UL Channelisation Code Length in the new configuration. The Node B shall apply the contents of the *Max Number Of E-DPDCHs* IE (if it is included) in the new configuration.]
- [FDD If the *E-DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration]
- [FDD If the *E-DPCH Information* IE includes the *E-TFCS* IE, the Node B shall use the *E-TFCS* IE for the E-DCH when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the uplink of the new configuration.]
- [FDD If the *E-DPCH Information* IE includes the *E-TTI* IE, the Node B shall use the value when the new configuration is being used.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IE, then the Node B shall treat them each as follows:]

- [TDD If the IE includes any of the *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD If the IE includes any *UL DPCH To Add* IE, *UL DPCH To Add LCR* IE, *DL DPCH To Add LCR* IE, or *DL DPCH To Add* IE, the Node B shall include this DPCH in the new configuration.]
- [TDD If the IE includes any *UL DPCH To Delete* IE or *DL DPCH To Delete* IE, the Node B shall remove this DPCH in the new configuration.]
- [TDD If the IE includes any *UL DPCH To Modify* IE or *DL DPCH To Modify* IE and includes any of the *Repetition Period* IE, *Repetition Length* IE or *TDD DPCH Offset* IE, or the message includes UL/DL Timeslot Information and includes any of the [3.84Mcps TDD *Midamble Shift And Burst Type* IE], [1.28Mcps TDD *Midamble Shift LCR* IE], or *TFCI Presence* IE or the message includes UL/DL Code information and includes [3.84Mcps TDD *TDD Channelisation Code* IE], [1.28Mcps TDD *TDD Channelisation Code LCR* IE], [1.28Mcps TDD *TDD UL DPCH Time Slot Format LCR* IE or *TDD DL DPCH Time Slot Format LCR* IE], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD If the *UL CCTrCH To Modify* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]
- [1.28Mcps TDD If the *UL CCTrCH to Modify* IE includes the *TDD TPC UL Step Size* IE, the Node B shall apply this value to the uplink TPC step size in the new configuration.]
- [TDD If the *DL CCTrCH to Modify* IE includes the *TDD TPC DL Step Size* IE, the Node B shall apply this value to the downlink TPC step size in the new configuration.]

[TDD – UL/DL CCTrCH Addition]

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

[TDD – If the *UL/DL CCTrCH To Add* IE includes any [3.84Mcps TDD - *UL/DL DPCH Information* IE] [1.28Mcps TDD - *UL/DL DPCH Information LCR* IE], the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

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

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

[1.28Mcps TDD – The Node B shall use the *UL SIR Target* IE in the *UL CCTrCH To Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted , the Node B shall remove this CCTrCH in the new configuration.]

DL Power Control:

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, at the CFN in the RADIO LINK RECONFIGURATION COMMIT message, according to subclause 8.3.7, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION READY message.]

DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add*, *DSCH To Modify* or *DSCH To Delete* IE, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFC12 Bearer Information* IE, then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist for this Node B Communication Context. The *Binding ID* IE and *Transport Layer Address* IE of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IE in the *TFC12 Bearer Information* IE the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a TFC12 transport bearer. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFC12 transport bearer is to be deleted, then the Node B shall release the resources associated with that bearer in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Request Indicator* IE in the *TFCI2 Bearer Information* IE with the value "New Bearer Requested", the Node B shall establish a new transport bearer replacing the existing transport bearer on which the DSCH TFCI Signaling control frames shall be received. The *Binding ID* IE and *Transport Layer Address* IE of a new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI field but a TFCI2 transport bearer has not already been set up and *TFCI2 Bearer Information* IE is not included in the message, then the Node B shall transmit the TFCI2 field with zero power in the new configuration.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK RECONFIGURATION PREPARE message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message, then the Node B shall transmit the TFCI2 field with zero power until Synchronisation is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer in the new configuration (see ref. [24]).]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Length Of TFC12* IE, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length Of TFCI2* IE and the *Split Type* IE is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DSCH Common Information* IE, the Node B shall treat it as follows:]

- [FDD If the *Enhanced DSCH PC Indicator* IE is included and set to "Enhanced DSCH PC Active in the UE", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
 - [FDD the SSDT Cell Identity for EDSCHPC IE in the RL Information IE, if the SSDT Cell Identity IE is not included in the RL Information IE or]
 - [FDD the SSDT Cell Identity IE in the RL Information IE, if both the SSDT Cell Identity IE and the SSDT Cell Identity for EDSCHPC IE are included in the RL Information IE.]

[FDD - together with the SSDT Cell Identity Length IE in UL DPCH Information IE, and Enhanced DSCH PC IE, in the new configuration.]

[FDD - If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", the Node B shall deactivate enhanced DSCH power control in the new configuration.]

[TDD – USCH Addition/Modification/Deletion]:

- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified, if the *TNL QoS* IE is included and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply between the Node B and the CRNC for the related USCHs.]
- [TDD The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

RL Information:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *p*th to "*PhCH number p*".]
- [FDD If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD If the *RL Information* IE includes the *Qth Parameter* IE and the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated in the new configuration.]
- [FDD If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]

- [FDD If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. During compressed mode, the δP_{curr} , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [3.84 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum CCTrCH DL power, otherwise the maximum CCTrCH DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. If no *Maximum Downlink Power* IE is included (even if *CCTrCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum CCTrCH DL power, otherwise the minimum CCTrCH DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. If no *Minimum Downlink Power* IE is included (even if *CCTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD If the *DL CCTrCH To Modify* IE is included and *Maximum CCTrCH DL Power to Modify* IE and/or *Minimum CCTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCTrCH. If the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values for all other DCH type CCTrCHs of the radio link.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Modify* IE is included and *Maximum DL Power to Modify LCR* IE and/or *Minimum DL Power to Modify LCR* IE are included, the Node B shall apply the values in the new configuration for this timeslot, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [3.84Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]
- [3.84Mcps TDD The initial power, maximum power, and minimum power for a DSCH type CCTrCH to be added or modified, shall be determined as follows:

- If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
- If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].
- [1.28 Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot in a DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the initial DL power, otherwise the initial DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]
- [1.28Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot within the DSCH type CCTrCH by the following rule: If both the *CCTrCH Initial DL Transmission Power* IE and the *DL Time Slot ISCP Info LCR* IE are included then the Node B shall use that power for the PDSCH power, otherwise the PDSCH power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. If *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each PDSCH and on each timeslot of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing RL/timeslots when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL PDSCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL PDSCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Modify* IE is included and the *Maximum CCTrCH DL Power to Modify* IE and/or the *Minimum CCTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [FDD- If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]

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

[TDD - PDSCH RL ID]:

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE then in the new configuration the Node B shall use the PDSCH and/or PUSCH in this radio link.]

Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

HS-DSCH Setup:

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

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10].]

Intra-Node B Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- In the new configuration the Node B shall de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link and allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.
- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

HS-DSCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Window Size* IE or *T1* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated values in the new configuration for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-d PDU Size Index* IE in the *Modify Priority Queue* choice, the Node B shall delete the previous list of MAC-d PDU Size Index values for the related HSDPA Priority Queue and use the MAC-d PDU Size Index values indicated in the *MAC-d PDU Size Index* IE in the new configuration.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *CQI Feedback Cycle k* IE, the *CQI Repetition Factor* IE, the *ACK-NACK Repetition Factor* IE, the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated CQI Feedback Cycle k value, the CQI Repetition Factor or the ACK-NACK Repetition Factor, ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH Information* IE or the *HS-DSCH Information To Modify* IE, then the Node B shall use the measurement power offset as described in [10] subclause 6A.2.]
- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use the indicated power offset in the new configuration.]

- [FDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH parameters corresponding to the HS-DSCH. The Node B shall then report the values for the parameters which are used in the new configuration specified in the [3.84Mcps TDD *HS-SCCH Specific Information Response LCR*] IEs 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 Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10].]

HS-DSCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated HS-DSCH MAC-d flows. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release the HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d Flows To Add* IE, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The Node B may include the HARQ Memory Partitioning IE in the RADIO LINK RECONFIGURATION READY message.

E-DCH Setup:

If the E-DCH FDD Information IE is present in the RADIO LINK RECONFIGURATION PREPARE message:

- The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE in the *RL Information* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *Data Description Indicator* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the the *Maximum Number Of Retransmissions For E-DCH* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.
- 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 Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.

- The Node B shall include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-RGCH Signature Sequence* and *E-HICH Signature Sequence* IEs 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 in the *RL Information* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B, then the Node B shall allocate an E-RNTI identifier for the corresponding RL and include this E-RNTI identifier and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message.

Serving E-DCH Radio Link Change:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:

- If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.
- If the new Serving E-DCH RL is in this Node B, the Node B shall allocate an E-RNTI identifier for the new Serving E-DCH Radio Link and include this identifier along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message.

E-DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information To Modify* IE, then:

- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Data Description Indicator* IE, the Node B shall delete the previous list of Data Description Indicator values for this Node B Communication Context and use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.

E-DCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.

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 Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.

If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH MAC-d Flows To Add IE, then:

- If the RADIO LINK RECONFIGURATION PREPARE message includes the MAC-es Guaranteed Bit Rate IE
 in the E-DCH MAC-d Flows To Add IE, the Node B shall use this information to optimise MAC-e scheduling
 decisions.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the the *Maximum Number of Retransmissions for E-DCH* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.

[FDD - Phase Reference Handling]:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Primary CPICH Usage For Channel Estimation* IE, the Node B shall assume that Primary CPICH usage for channel estimation has been reconfigured.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Secondary CPICH Information Change* IE, the Node B shall assume that Secondary CPICH usage for channel estimation has been reconfigured.]

General

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *DSCHs To Modify*, *DSCHs To Add*, [TDD - *USCHs To Modify*, *USCHs To Add*], *HS-DSCH Information*,

HS-DSCH Information To Modify, HS-DSCH MAC-d Flows To Add, E-DCH Information, E-DCH Information To Modify, E-DCH MAC-d Flows To Add or in the RL Specific DCH Information IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel or MAC-d flow being added, or any Transport Channel or MAC-d flow being modified for which a new transport bearer was requested with the Transport Bearer Request Indicator IE.

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel or MAC-d flow being added or any Transport Channel or MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.2.3 Unsuccessful Operation

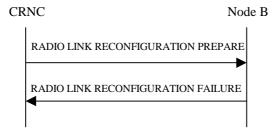


Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs, the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- UL SF not supported
- DL SF not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- Number of DL codes not supported
- Number of UL codes not supported
- RL Timing Adjustment not supported
- HARQ Preamble Mode not supported

- F-DPCH not supported.

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

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

8.3.2.4 Abnormal Conditions

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

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

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed if the *UL DPCH Information* IE does not include the *SSDT Cell Identity Length* IE. In this case, it shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

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

[FDD - If the *RL Information* IE includes the *DL Reference Power* IE, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the RADIO LINK RECONFIGURATION PREPARE message IE includes more than one *DL Reference Power* IE, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Length Of TFC12* IE but the *TFCI Signalling Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length Of TFC12* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message is to modify UE channel estimation information for an existing RL and the modification is not allowed according to [10] subclause 4.3.2.1, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE deleting the last remaining Priority Queue of an HS-DSCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[TDD - If multiple radio links exist within the Node B Communication Context and the RADIO LINK RECONFIGURATION PREPARE message does not include a *RL ID* IE within each *UL DPCH To Add Per RL* IE, *DL DPCH To Add Per RL* IE, *UL DPCH To Modify Per RL* IE, and *DL DPCH To Modify Per RL* IE that is present in the message, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

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

If the RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

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

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

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink in the old configuration and the RADIO LINK RECONFIGURATION PREPARE message includes at least one but not all of the TFCS IE, DL DPCH Slot Format IE, TFCI Signalling Mode IE, Multiplexing Position IE, Limited Power Increase IE and DL DPCH Power Information IE in the DL DPCH Information IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink in the old configuration, if the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Information* IE, if at least one Transmission Gap Pattern Sequence is configured with an SF/2 downlink compressed mode method in the new Compressed Mode Configuration and if the RADIO LINK RECONFIGURATION PREPARE message does not

include the *Transmission Gap Pattern Sequence Code Information* IE for each DL Channelisation Code, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

8.3.3 Synchronised Radio Link Reconfiguration Commit

8.3.3.1 General

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

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.3.2 Successful Operation



Figure 32:Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.

[FDD – If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the Node B.]

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 modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the indicated CFN. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1 and in [24], subclause 5.8.2.

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has received the RADIO LINK RECONFIGURATION COMMIT message via the old Communication Control Port.

[FDD – If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CFN* IE. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

[FDD - If the RADIO LINK RECONFIGURATION COMMIT message includes the *Active Pattern Sequence Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall 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.]

8.3.3.3 Abnormal Conditions

If a new transport bearer is required for the new reconfiguration and it is not available at the requested CFN, the Node B shall initiate the Radio Link Failure procedure.

8.3.4 Synchronised Radio Link Reconfiguration Cancellation

8.3.4.1 General

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

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.4.2 Successful Operation



Figure 33:Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation

When receiving the RADIO LINK RECONFIGURATION CANCEL message from the CRNC, the Node B shall release the new configuration ([FDD - including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure and continue using the old configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

8.3.4.3 Abnormal Conditions

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8.3.5 Unsynchronised Radio Link Reconfiguration

8.3.5.1 General

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

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

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

8.3.5.2 Successful Operation

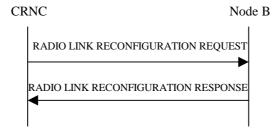


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Modify* IE then the Node B shall treat them each as follows:

- If the *DCHs To Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs To Modify* IE includes the *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH To Add* IE, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.

- [TDD If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- [FDD For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCHas the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

[FDD - Physical Channel Modification]:

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD - If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the information when building TFCIs in the new configuration.
 - [FDD If the *Length Of TFCI2* IE is included, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]
 - [FDD If the *Length Of TFCI2* IE is not included and the *Split Type* IE is present with the value "Hard", then the Node B shall assume the value of the TFCI (field 2) is 5 bits in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD - E-DPCH Handling]:

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *E-TFCS* IE, the Node B shall use the *E-TFCS* IE for the E-DCH when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the uplink of the new configuration.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE includes *TFCS* IE and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the Node B shall apply this value as the new configuration and use it for the UL inner loop power control according [19] and [21].]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Delete* IE or *DL CCTrCH To Delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

DL Power Control:

[FDD – If the Radio Link Information IE includes the DL Reference Power IE and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the DL Reference Power IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD – If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

RL Information:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH or on the F-DPCH of the Radio Link once the new configuration is being used. During compressed mode, the δP_{curr} , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [FDD If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code or on the F-DPCH of the Radio Link once the new configuration is being used.]
- [3.84 Mcps TDD If the *CCTrCH Maximum DL Transmission Power* IE and/or the *CCTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other DCH type CCTrCHs.]
- [3.84 Mcps TDD The maximum power and minimum power for a DSCH type CCTrCH to be modified, shall be determined as follows:
 - If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum and maximum power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
 - If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum power, however, is subject to control by the CRNC via the frame protocol].
- [1.28 Mcps TDD If *Maximum DL Power* IE and/or *Minimum DL Power* IE are included within *DL Timeslot Information LCR* IE, the the Node B shall apply the values in the new configuration for this timeslot within a DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [1.28 Mcps TDD If the *CCTrCH Maximum DL Transmission Power* IE and/or the *CCTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CCTrCH, if the *RL Information* IE includes the *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for other timeslots.]
- [FDD If the concerned Node B Communication Context is configured to use DPCH in the downlink and if the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [1.28Mcps TDD If the *RL Information* IE contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

Signalling Bearer Re-arrangement:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Signalling Bearer Request Indicator* IE, the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

HS-DSCH Setup:

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

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10].]

Intra-Node B Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The Node B shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.
- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

HS-DSCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information To ModifyUnsynchronised* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, if the

Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [32].

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B shall use the indicated power offset in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10].]

HS-DSCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs and if the Serving HS-DSCH Radio Link is in the Node B, then the Node B shall use this information to add/delete the indicated HS-DSCH MAC-d flows on the Serving HS-DSCH Radio Link. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION REQUEST message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release any existing HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d Flows To Add* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.

E-DCH Setup:

If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message:

- The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE in the *RL Information* IE.

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the the *Maximum Number Of Retransmissions For E-DCH* IE in the *E-DCH MAC-d Flows Information* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.
- 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 Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- The Node B shall include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-RGCH Signature Sequence* and *E-HICH Signature Sequence* IEs 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 in the *RL Information* IE.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Serving E-DCH RL* IE, then the Node B shall allocate an E-RNTI identifier for the corresponding RL and include this E-RNTI identifier and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

Serving E-DCH Radio Link Change:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:

- If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.
- If the New Serving E-DCH RL is in this Node B, the Node B shall allocate an E-RNTI identifier for the new Serving E-DCH Radio Link and include this identifier along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

E-DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE, then:

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Data Description Indicator* IE, the Node B shall delete the previous list of DDI values for this Node B Communication Context and use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.

E-DCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.

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 Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the E-DCH MAC-d Flows To Add IE, then:

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the the *Maximum Number Of Retransmissions For E-DCH* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.

General

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *HS-DSCH Information* IE, *HS-DSCH Information To Modify Unsynchronised* IE, *HS-DSCH MAC-d Flows To Add* IE, *E-DCH Information* IE, *E-DCH Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE or in the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel or MAC-d flow being added or any Transport Channel or MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel or MAC-d flow being added or any Transport Channel or MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has sent the RADIO LINK RECONFIGURATION RESPONSE message via the old Communication Control Port.

8.3.5.3 Unsuccessful Operation

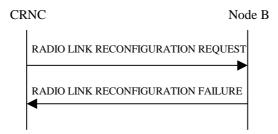


Figure 35: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be set-up, it shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- CM not supported
- HARQ Preamble Mode not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

O&M Intervention

- Control processing overload
- HW failure

8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD – If the concerned Node B Communication Context is configured to use DPCH in the downlink and if the *RL Information* IE contains the *DL Code Information* IE and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number* IEs not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.]

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

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

[FDD - If the *RL Information* IE includes the *DL Reference Power* IEs, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Length Of TFC12* IE but the *TFCI Signalling Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message does not include the *Length Of TFC12* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

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

If the RADIO LINK RECONFIGURATION REQUEST message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the concerned Node B Communication Context is configured to use F-DPCH in the downlink and if the *RL Information* IE contains the *DL Code Information* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.]

8.3.6 Radio Link Deletion

8.3.6.1 General

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

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.6.2 Successful Operation

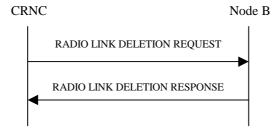


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID* IE, *Node B Communication Context ID* IE and *CRNC Communication Context ID* IE and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message. [FDD – Resources associated with the TFCI2 bearer shall be released only if all the RLs in the Node B Communication Context are deleted].

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE that are configured in the cells supporting the radio links of the RL Set and the UL in-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters N_INSYNC_IND that are configured in the cells supporting the radio links of the RL Set.]

8.3.6.3 Unsuccessful Operation

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8.3.6.4 Abnormal Conditions

If the RL indicated by the *RL ID* IE, *Node B Communication Context ID* IE and *CRNC Communication Context ID* IE does not exist, the Node B shall respond with the RADIO LINK DELETION RESPONSE message and use the *CRNC Communication Context ID* IE received in the RADIO LINK DELETION REQUEST message.

8.3.7 Downlink Power Control [FDD]

8.3.7.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more Radio Links used for the related UE-UTRAN connection within the Node B. The Downlink Power Control procedure may be initiated by the CRNC at any time when the Node B Communication Context exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B Communication Context. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Control procedure shall no longer be initiated.

8.3.7.2 Successful Operation



Figure 37: Downlink Power Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The *Power Adjustment Type* IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is "Common", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Common". As long as the Power Balancing Adjustment Type of the Node B Communication Context is set to "Common", the Node B shall perform the power adjustment (see below) for all existing and future radio links associated with the context identified by the *Node B Communication Context ID* IE and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is "Individual", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Individual". The Node B shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Powers per RL. If the Power Balancing Adjustment Type of the Node B Communication Context was set to "Common" before this message was received, power balancing on all radio links not addressed by the DL POWER CONTROL REQUEST message shall remain to be executed in accordance with the existing power balancing parameters which are now considered RL individual parameters. Power balancing will not be started on future radio links without a specific request.

If the value of the *Power Adjustment Type* IE is "None", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "None" and the Node B shall suspend on going power adjustments for all radio links for the Node B Communication Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the Node B shall activate inner loop DL power control for all radio links for the Node B Communication Context. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the Node B shall deactivate inner loop DL power control for all radio links for the Node B Communication Context according to ref. [10].

Power Adjustment

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see ref. [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1 - r)(P_{ref} + P_{P-CPICH} - P_{init})$$
 with an accuracy of ± 0.5 dB

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE, P_{ref} is the value of the *DL Reference Power* IE, $P_{P-CPICH}$ is the power used on the primary CPICH, P_{init} is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode, P_{init} shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the CRNC.

The power adjustments shall be started at the first slot of a frame with CFN modulo the value of *Adjustment Period* IE equal to 0 and shall be repeated for every adjustment period and shall be restarted at the first slot of a frame with CFN=0, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted.

8.3.7.3 Abnormal Conditions

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8.3.8 Dedicated Measurement Initiation

8.3.8.1 General

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

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1 except when the *Node B Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message is set to the reserved value "All NBCC".

If the *Node B Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message is set to the reserved value "All NBCC", the Dedicated Measurement Initiation procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

8.3.8.2 Successful Operation

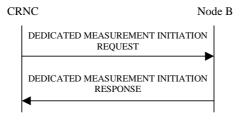


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

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

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

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on "All NBCC".

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5]. The initiation of the measurement for a Node B Communication Context may be delayed until the Reconfiguration CFN has elapsed if either a Prepared Reconfiguration exists or a Prepared Reconfiguration no longer exists but the Reconfiguration CFN has not yet elapsed.

If the Dedicated Measurement Object Type is indicated as being "RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Links.

[FDD – If the Dedicated Measurement Object Type is indicated as being "RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the Dedicated Measurement Object Type is indicated as being "ALL RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the *DPCH ID* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE, *HS-SICH ID* IE and no *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for one existing physical channel per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this physical channel.]

[TDD – If the *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

[TDD – If the *HS-SICH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

[TDD - If the *Dedicated Measurement Type* IE is set to "HS-SICH reception quality", the Node B shall initiate measurements of the failed, missed and total HS-SICH transmissions on all of the HS-SICH assigned to this Node B Communication Context. If either the failed or missed HS-SICH transmission satisfies the requested report characteristics, the Node B shall report the result of both failed and missed transmission measurements along with the total number of transmissions.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the DEDICATED MEASUREMENT REPORT message or in the DEDICATED MEASUREMENT INITIATION RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand". The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

[FDD – If the *Number Of Reported Cell Portions* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message, the value shall be used to determine how many *Cell Portion ID* IEs and *SIR Value* IEs shall be included in *Best Cell Portions* IE in the DEDICATED MEASUREMENT REPORT message or in the DEDICATED MEASUREMENT INITIATION RESPONSE message.]

Report characteristics

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

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

If the *Report Characteristics* IE is set to "Periodic", the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency. If the *CFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Event A", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero for the hysteresis time.

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

If the *Report Characteristics* IE is set to "Event C", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "Event D", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the falling time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "Event E", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold* 2 IE is not present, the Node B shall use the value of the *Measurement Threshold* 1 IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "Event F", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the Node B shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to "On Demand", the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object for which a measurement is defined exists anymore, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

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

Higher layer filtering

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

The averaging shall be performed according to the following formula.

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

The variables in the formula are defined as follows

 F_n is the updated filtered measurement result

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

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

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

In order to initialise the averaging filter, F_0 is set to M_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 Node B shall, if Measurement Recovery Behavior is supported, include the *Measurement Recovery Support Indicator* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE message and perform the Measurement Recovery Behavior as described in subclause 8.3.9.2.

Response message

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message using the Communication Control Port assigned to the Node B Communication Context. The message shall include the same Measurement ID that was used in the measurement request. The DEDICATED MEASUREMENT INITIATION RESPONSE message shall be sent even if the initiation is delayed for some Node B Communication Contexts due to an existing Prepared Reconfiguration or that the Reconfiguration CFN has not yet elapsed.

Only in the case where the *Report Characteristics* IE is set to "On Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the *Dedicated Measurement Object Type* IE containing the measurement result. [TDD – In the case that the measurement was performed on a particular HS-SICH, the Node B shall include the *HS-SICH ID* IE that indicates which HS-SICH was measured.]

In the case where the *Node B Communication Context ID* IE is set to "All NBCC", the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Interaction with Reset Procedure:

If a measurement has been requested with the *Node B Communication Context ID* IE set to "All NBCC", the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

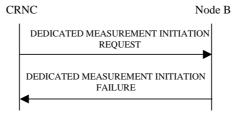


Figure 39: Dedicated Measurement Initiation procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the Communication Control Port assigned to the Node B Communication Context. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

In the case where the *Node B Communication Context ID* IE is set to "All NBCC" the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Typical cause values are as follows:

Radio Network Layer cause

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

Miscellaneous Cause

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

8.3.8.4 Abnormal Conditions

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

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

Dedicated Measurement Type	Report Characteristics 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	X	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 LCR	Х	Х	Х	Х			Х	Х	
HS-SICH reception quality	Х	Х	Х	Х			Х	Х	
Best Cell Portions	Х	Х							
Angle Of Arrival LCR	Х	Х							

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

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

8.3.9 Dedicated Measurement Reporting

8.3.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Dedicated Measurement Initiation procedure. The Node B may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link, as long as the Node B Communication Context exists.

8.3.9.2 Successful Operation



Figure 40: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Dedicated Measurement Reporting procedure. The DEDICATED MEASUREMENT REPORT message shall use the Communication Control Port assigned to the Node B Communication Context. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the Node B may include measurement values for multiple objects in the DEDICATED MEASUREMENT REPORT message. Unless specified below, the meaning of the parameters are given in other specifications.

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

[TDD – In the case that the measurement was performed on a particular HS-SICH, the Node B shall include the *HS-SICH ID* IE that indicates which HS-SICH was measured.]

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]) or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the Measurement not available shall be reported. If the Node B was configured to perform the Measurement Recovery Behavior, the Node B shall indicate Measurement Available to the CRNC when the achieved measurement accuracy again fulfils the given accuracy requirement (see ref. [22] and [23]) and include the *Measurement Recovery Report Indicator* IE in the DEDICATED MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

8.3.9.3 Abnormal Conditions

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8.3.10 Dedicated Measurement Termination

8.3.10.1 General

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

The Dedicated Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1 except if the measurement was initiated by the Dedicated Measurement Initiation procedure using the reserved value "All NBCC".

If the measurement was initiated by the Dedicated Measurement Initiation procedure using the reserved value "All NBCC", the Dedicated Measurement Termination procedure may be initiated by the CRNC at any time.

8.3.10.2 Successful Operation



Figure 41: Dedicated Measurement Termination procedure, Successful Operation

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

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

8.3.10.3 Abnormal Conditions

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8.3.11 Dedicated Measurement Failure

8.3.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. The Node B is allowed to initiate the DEDICATED MEASUREMENT FAILURE INDICATION message at any time after having sent the RADIO LINK SETUP RESPONSE message, as long as the Node B Communication Context exists.

8.3.11.2 Successful Operation



Figure 42: Dedicated Measurement Failure procedure, Successful Operation

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

If the failed measurement was initiated with the *Node B Communication Context ID* IE set to the reserved value "All NBCC" and the Node B has terminated the measurement reporting of the measurement corresponding to the Measurement ID indicated in the DEDICATED MEASUREMENT FAILURE INDICATION message, the *CRNC Communication Context ID* IE shall be set to the value "All CRNCCC".

8.3.11.3 Abnormal Conditions

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8.3.12 Radio Link Failure

8.3.12.1 General

This procedure is used by the Node B to indicate a failure in one or more Radio Links [FDD - or Radio Link Sets][TDD or CCTrCHs within a Radio Link].

The Node B may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

8.3.12.2 Successful Operation



Figure 43: Radio Link Failure procedure, Successful Operation

When the Node B detects that one or more Radio Link(s) [FDD - or Radio Link Set(s)] [TDD - or CCTrCHs within a Radio Link] are no longer available, it sends the RADIO LINK FAILURE INDICATION message to the CRNC indicating the failed Radio Link(s) or Radio Link Set(s) or CCTrCHs with the most appropriate cause values in the *Cause* IE. The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

If the failure concerns one or more individual Radio Link(s), the Node B shall indicate the affected Radio Link(s) using the *RL Information* IE. [FDD - If the failure concerns one or more Radio Link Set(s), the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE.] [TDD – If the failure concerns only the failure of one or more CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID* IE.]

When the Radio Link Failure procedure is used to notify the loss of UL synchronisation of a [FDD – Radio Link Set] [TDD – Radio Link or CCTrCHs within a Radio Link] on the Uu interface, the RADIO LINK FAILURE INDICATION message shall be sent, with the *Cause* IE set to "Synchronisation Failure", when indicated by the UL out-of-sync algorithm defined in [10] and [21]. [FDD – The algorithms in [10] shall use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD – When the Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Link(s) / Radio Link Set(s) due to the occurrence of an UL or DL frame with more than one transmission gap caused by one or more compressed mode pattern sequences, the DL transmission shall be stopped and the RADIO LINK FAILURE INDICATION message shall be sent with the cause value "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link(s)/Radio Link Set(s) from the Node B Communication Context or the Node B Communication Context itself.]

In the other cases, the Radio Link Failure procedure is used to indicate that one or more Radio Link(s)/Radio Link Set(s) are permanently unavailable and cannot be restored. After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link/Radio Link Set from the Node B Communication Context or the Node B Communication Context itself. When applicable, the retention priorities associated with the transport channels shall be used by the Node B to prioritise which Radio Link(s)/Radio Link Set(s) to indicate as unavailable to the CRNC.

Typical cause values are:

Radio Network Layer Causes:

- Synchronisation Failure
- Invalid CM settings

Transport Layer Causes:

- Transport Resources Unavailable

Miscellaneous Causes:

- Control Processing Overload
- HW Failure

O&M Intervention

8.3.12.3 Abnormal Conditions

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8.3.13 Radio Link Restoration

8.3.13.1 General

This procedure is used by the Node B to notify the achievement and re-achievement of uplink synchronisation of one or more [FDD - Radio Link Sets][TDD - Radio Links or CCTrCHs within a Radio Link] on the Uu interface.

The Node B may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

8.3.13.2 Successful Operation



Figure 44: Radio Link Restoration procedure, Successful Operation

The Node B shall send the RADIO LINK RESTORE INDICATION message to the CRNC when indicated by the UL synchronisation detection algorithm defined in ref. [10] and [21]. [FDD – The algorithm in ref. [10] shall use the minimum value of the parameters N_INSYNC_IND that are configured in the cells supporting the radio links of the RL Set.] The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

[TDD – If the re-established Uu synchronisation concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information* IE.] [TDD – If the re-established Uu synchronisation concerns one or more individual CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID* IE.] [FDD – If the re-established Uu synchronisation concerns one or more Radio Link Set(s), the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE.]

8.3.13.3 Abnormal Condition

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8.3.14 Compressed Mode Command [FDD]

8.3.14.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the Node B for one Node B Communication Context.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.14.2 Successful Operation



Figure 47: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the CRNC sending a COMPRESSED MODE COMMAND message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CM Configuration Change CFN* IE requested by the CRNC when receiving the COMPRESSED MODE COMMAND message from the CRNC. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions (if present) shall be started when the indicated *TGCFN* IE elapses. The *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value.

If the values of the *CM Configuration Change CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CM Configuration Change CFN* IE.

If the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall 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.

8.3.14.3 Abnormal Conditions

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8.3.15 Downlink Power Timeslot Control [TDD]

8.3.15.1 General

The purpose of this procedure is to enable the Node B to use the indicated DL Timeslot ISCP values when deciding the DL TX Power for each timeslot.

The Downlink Power Timeslot Control procedure can be initiated by the CRNC at any time when the Node B Communication Context exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B Communication Context. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Timeslot Control procedure shall no longer be initiated.

8.3.15.2 Successful Operation



Figure 47A: Downlink Power Timeslot Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER TIMESLOT CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall use the indicated DL Timeslot ISCP value when deciding the DL TX Power for each timeslot as specified in ref. [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link

where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.

If the *Primary CCPCH RSCP Delta* IE is included, the NodeB shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per [23], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the Node B shall assume that the reported value is in the non-negative range as per [23], and the value is equal to the *Primary CCPCH RSCP* IE. The Node B should use the indicated value for HS-DSCH scheduling and transmit power adjustment.

8.3.15.3 Abnormal Conditions

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8.3.16 Radio Link Pre-emption

8.3.16.1 General

This procedure is started by the Node B when resources need to be freed.

The Node B may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

8.3.16.2 Successful Operation

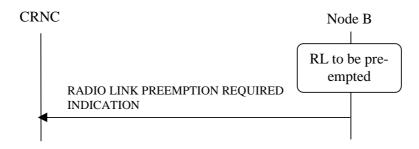


Figure 47B: Radio Link Pre-emption procedure, Successful Operation

When the Node B detects that a one or more Radio Links should be pre-empted (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the CRNC using the Communication Control Port assigned to the concerned Node B Communication Context.

If all Radio Links for a CRNC Communication Context ID should be pre-empted, the *RL Information* IE shall be omitted. If one or several but not all Radio Links should be pre-empted for a CRNC Communication Context, the Radio Links that should be pre-empted shall be indicated in the *RL Information* IE. The Radio Link(s) that should be pre-empted should be deleted by the CRNC.

8.3.16.3 Abnormal Conditions

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8.3.17 Bearer Re-arrangement

8.3.17.1 General

This procedure is started by the Node B when Bearers for the Node B Communication Context need to be rearranged.

The Node B may initiate the Bearer Rearrangement procedure at any time after establishing a Radio Link.

8.3.17.2 Successful Operation



Figure 47C: Bearer Re-arrangement Indication, Successful Operation

When the Node B detects that a signaling bearer or a transport bearer or both need to be re-arranged for the Node B Communication Context, it shall send the BEARER REARRANGEMENT INDICATION message to the CRNC. The message shall use the Communication Control Port assigned for this Node B Communication Context.

If the signaling bearer for the control of the Node B Communication Context needs to be rearranged, the *Signalling Bearer Requested Indicator* IE shall be included in the BEARER REARRANGEMENT INDICATION message.

If the transport bearer for a transport channel needs to be rearranged, the ID of the transport channel for which a new transport bearer is required, shall be included in the BEARER REARRANGEMENT INDICATION message.

[FDD - If the TFCI2 bearer on which the DSCH TFCI Signaling control frames shall be received is required to be rearranged, the *TFCI2 Bearer Request Indicator* IE shall be included in the BEARER REARRANGEMENT INDICATION message.]

8.3.17.3 Abnormal Conditions

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8.3.18 Radio Link Activation

8.3.18.1 General

This procedure is used to activate or de-activate the DL transmission on the Uu interface regarding selected RLs.

8.3.18.2 Successful Operation



Figure 47D: Radio Link Activation procedure

This procedure is initiated by sending the RADIO LINK ACTIVATION COMMAND message from the CRNC to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context. Upon reception, the Node B shall for each concerned RL:

- if the *Delayed Activation Update* IE indicates "Activate":
 - if the *Activation Type* IE equals "Unsynchronised":

- [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].]
- [TDD start transmission on the new RL immediately as specified in [16].]
- if the *Activation Type* IE equals "Synchronised":
 - [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
 - [TDD start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]
- [FDD the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH or on the F-DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or power balancing is activated. During this period no inner loop power control shall be performed and, unless activated by the DL POWER CONTROL REQUEST message, no power balancing shall be performed. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and downlink power balancing adjustments (see subclause 8.3.7).]
- [TDD the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu interface is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]
- [FDD if the *Propagation Delay* IE is included, the Node B may use this information to speed up the detection of UL synchronisation on the Uu interface.]
- [FDD if the *First RLS Indicator* IE is included, it indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC Pattern 01 Count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]
- if the *Delayed Activation Update* IE indicates "Deactivate":
 - stop DL transmission immediately, if the *Deactivation Type* IE equals "Unsynchronised", or at the CFN indicated by the *Deactivation CFN* IE, if the *Deactivation Type* IE equals "Synchronised".

8.3.18.3 Abnormal Conditions

[FDD- If the *Delayed Activation Update* IE is included in the RADIO LINK ACTIVATION COMMAND message, it indicates "Activate" and the *First RLS Indicator* IE is not included, the Node B shall initiate the Error Indication procedure.]

8.3.19 Radio Link Parameter Update

8.3.19.1 General

The Radio Link Parameter Update procedure is excuted by the Node B when the update of HS-DSCH related radio link parameter values are needed on the Node B side. With this procedure, Node B can suggest some HS-DSCH related Radio Link Parameter values to RNC.

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

8.3.19.2 Successful Operation



Figure 48: Radio Link Parameter Update Indication, Successful Operartion

The Node B initiates the Radio Link Parameter Update procedure by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the CRNC. The message contains suggested value(s) of the HS-DSCH related parameter(s) that should be reconfigured on the radio link.

If the Node B needs to update HS-DSCH related parameters, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD - HS-DSCH FDD Update Information IE] [TDD - HS-DSCH TDD Update Information IE].

If the Node B needs to allocate new HS-SCCH Codes, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator* IE.

[FDD - If the Node B needs to update the CQI Feedback Cycle k, CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle k* IE, *CQI Repetition Factor* IE, *ACK-NACK Repetition Factor* IE, *CQI Power Offset* IE, *ACK Power Offset* IE and/or *NACK Power Offset* IE.]

[TDD - If the Node B needs to update the TDD ACK-NACK Power Offset the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including TDD ACK-NACK Power Offset IE.]

8.3.19.3 Abnormal Conditions

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8.4 Error Handling Procedures

8.4.1 Error Indication

8.4.1.1 General

The Error Indication procedure is initiated by a node in order to report detected errors in one incoming message, provided they cannot be reported by an appropriate response message.

8.4.1.2 Successful Operation

When the conditions defined in subclause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node.

In case the Error Indication procedure was triggered by a dedicated procedure, the following applies:

- When the ERROR INDICATION message is sent from a Node B to its CRNC, the *CRNC Communication Context ID* IE shall be included in the message if the corresponding Node B Communication Context, addressed by the *Node B Communication Context ID* IE which was received in the message triggering the Error Indication procedure, exists;
- When the ERROR INDICATION message is sent from a CRNC to a Node B, the Node B Communication
 Context ID IE shall be included in the message if the corresponding CRNC Communication Context,
 addressed by the CRNC Communication Context ID IE which was received in the message triggering the Error
 Indication procedure, exists;

- When the message triggering the Error Indication procedure is received in the Node B and there is no Node B Communication Context as indicated by the *Node B Communication Context ID* IE, the Node B shall include the unknown *Node B Communication Context ID* IE from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.
- When the message triggering the Error Indication procedure is received in the CRNC and there is no CRNC Communication Context as indicated by the *CRNC Communication Context ID* IE, the CRNC shall include the unknown *CRNC Communication Context ID* IE from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause* IE, or the *Criticality Diagnostics* IE or both the *Cause* IE and the *Criticality Diagnostics* IE.

Typical cause values for the ERROR INDICATION message are:

Protocol Causes:

- Transfer Syntax Error
- Abstract Syntax Error (Reject)
- Abstract Syntax Error (Ignore and Notify)
- Message not Compatible with Receiver State
- Unspecified

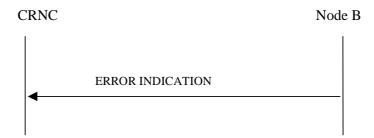


Figure 49: Error Indication procedure (Node B to CRNC): Successful Operation

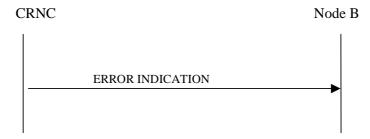


Figure 50: Error Indication procedure (CRNC to Node B), Successful Operation

8.4.1.3 Abnormal Conditions

9 Elements for NBAP communication

9.1 Message Functional Definition and Contents

9.1.1 General

Subclause 9.1 presents the contents of NBAP messages in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, where the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in ref. [26].

9.1.2 Message Contents

9.1.2.1 Presence

An information element can be of the following types:

	M	IEs marked as Mandatory (M) shall always be included in the message.						
	0	IEs marked as Optional (O) may or may not be included in the message.						
ſ	С	IEs marked as Conditional (C) shall be included in a message only if the condition is satisfied.						
		Otherwise the IE shall not be included.						

In case of an Information Element group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. The presence field of the Information Elements inside one group defines if the Information Element is mandatory, optional or conditional if the group is present.

9.1.2.2 Criticality

Each Information Element or Group of Information Elements may have a criticality information applied to it. Following cases are possible:

_	No criticality information is applied explicitly.
YES	Criticality information is applied. "YES" is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information.
	"GLOBAL" is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign
	different criticality values to the repetitions. "EACH" is usable only for repeatable information elements.

9.1.2.3 Range

The Range column indicates the allowed number of copies of repetitive IEs.

9.1.2.4 Assigned Criticality

This column provides the actual criticality information as defined in subclause 10.3.2, if applicable.

9.1.3 COMMON TRANSPORT CHANNEL SETUP REQUEST

9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE Common Physical Channel To Be Configured	М				YES	ignore
>Secondary CCPCH					_	
>>Secondary CCPCH		1			_	
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>FDD SCCPCH Offset	М		9.2.2.15	Corresponds to [7]: S-CCPCH,k	_	
>>>DL Scrambling Code	C-PCH		9.2.2.13		_	
>>>FDD DL Channelisation Code Number	М		9.2.2.14		_	
>>>TFCS	М		9.2.1.58	For the DL.	_	
>>>Secondary CCPCH Slot Format	М		9.2.2.43		_	
>>>TFCI Presence	C- SlotFormat		9.2.1.57	Refer to TS [7]	_	
>>>Multiplexing Position	М		9.2.2.23		_	
>>>Power Offset		1			_	
Information						
>>>PO1	М		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>>PO3	М		Power Offset 9.2.2.29	Power offset for the pilot bits	_	
>>>STTD Indicator	М		9.2.2.48		_	
>>>FACH Parameters		0 <maxno ofFACHs></maxno 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>Transport Format Set	М		9.2.1.59	For the DL.	_	
>>>ToAWS	М		9.2.1.61		-	
>>>ToAWE	М		9.2.1.60		_	
>>>>Max FACH	М		DL Power	Maximum	_	
Power			9.2.1.21	allowed power on the FACH.		
>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if	YES	ignore

	1	1	T	haarar		
				bearer		
				establishment		
				with ALCAP.	\/=0	
>>>PCH Parameters		01	00444		YES	reject
>>>>Common Transport Channel ID	M		9.2.1.14		_	
>>>>Transport Format	М		9.2.1.59	For the DL.	_	
Set						
>>>>ToAWS	M		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60		_	
>>>PCH Power	М		DL Power 9.2.1.21		_	
>>>>PICH		1			-	
Parameters						
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>FDD DL	М		9.2.2.14			
Channelisation Code Number						
>>>>PICH Power	М		9.2.1.49A		_	
>>>>PICH Mode	M		9.2.2.26	Number of PI	_	
				per frame		
>>>>STTD Indicator	М		9.2.2.48		_	
>>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
3				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>>Transport Layer	0		9.2.1.63	Shall be	YES	ignore
Address				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>MICH Parameters		01			YES	reject
>>>Common	M		9.2.1.13		_	
Physical Channel ID						
>>>FDD DL	M		9.2.2.14		-	
Channelisation Code						
Number						
>>>>MICH Power	М		PICH		_	
			Power			
			9.2.1.49A			
>>>>MICH Mode	М		9.2.2.21D	Number of NI	_	
OTTO L P. 1	N4		0.0.0.40	per frame		
>>>STTD Indicator	М		9.2.2.48		_	
>PRACH		1				
>>PRACH	N/	1	0.04.40		_	
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>Scrambling Code	М		9.2.2.42		-	
Number						
>>>TFCS	M		9.2.1.58	For the UL.	_	
>>>Preamble	М		9.2.2.31		_	
Signatures						
>>>Allowed Slot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Format Information		ofSlotForm				
	Ì	atsPRACH				

				1		
DAOLLOI-4	N4	>	0.0.0.7			
>>>>RACH Slot Format	M		9.2.2.37		_	
>>>RACH Sub Channel	M		9.2.2.38			
Numbers	IVI		3.2.2.30			
>>>Puncture Limit	М		9.2.1.50	For the UL	_	
>>>Preamble Threshold	М		9.2.2.32		_	
>>>RACH Parameters		1	0.2.2.02		YES	reject
>>>Common	М		9.2.1.14		_	,
Transport Channel ID						
>>>>Transport Format	M		9.2.1.59	For the UL.	_	
Set						
>>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>AICH Parameters		1			_	
>>>Common	М		9.2.1.13		_	
Physical Channel ID						
>>>>AICH	M		9.2.2.1		_	
Transmission Timing			22211			
>>>>FDD DL Channelisation Code Number	М		9.2.2.14		_	
>>>AICH Power	М		9.2.2.D		_	
>>>STTD Indicator	М		9.2.2.48		_	
>PCPCHs					_	
>>CPCH Parameters		1			_	
>>>Common Transport Channel ID	M		9.2.1.14		-	
>>>Transport Format Set	М		9.2.1.59	For the UL.	-	
>>>AP Preamble Scrambling Code	M		CPCH Scrambling Code Number 9.2.2.4B		-	
>>>CD Preamble Scrambling Code	M		CPCH Scrambling Code Number 9.2.2.4B		_	
>>>TFCS	M		9.2.1.58	For the UL	-	
>>>CD Signatures	0		Preamble Signatures 9.2.2.31	Note: When not present, all CD signatures are to be used.	_	
>>>CD Sub Channel Numbers	0		9.2.2.1C		-	
>>>Puncture Limit	М		9.2.1.50	For the UL	_	
>>>CPCH UL DPCCH	M		9.2.2.4C	For UL CPCH	_	
Slot Format				message		

				control part		
>>>UL SIR	M		9.2.1.67A	control part		
>>>UL SIK	M		DL Power			
Transmission Power	IVI		9.2.1.21		_	
>>>Maximum DL Power	М		DL Power			
>>>iviaximum DL Fowei	IVI		9.2.1.21		_	
>>>Minimum DL Power	М		DL Power			
>>>Wilnimum DL Power	IVI		9.2.1.21		_	
>>>PO2	M		Power	Power offset for		
>>>PO2	IVI		Offset	the TPC bits	_	
			9.2.2.29	relative to the		
			9.2.2.29	pilot bits.		
>>>FDD TPC DL Step	М		9.2.2.16	pilot bits.		
Size	IVI		9.2.2.10		_	
	M		9.2.2.23C			
>>>N_Start_Message	M				_	
>>>N_EOT	M		9.2.2.23A			
>>>Channel	IVI		9.2.2.1D		_	
Assignment Indication	NA	+	0.0.0.4.4	+		
>>>CPCH Allowed Total	М		9.2.2.4A		-	
Rate >>>PCPCH Channel		1 :		+		
		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofPCPCHs				
0	NA.	>	0.0.4.40	+		
>>>>Common	М		9.2.1.13		_	
Physical Channel ID			0.00.45	5 111 000011		
>>>CPCH	М		9.2.2.4B	For UL PCPCH	_	
Scrambling Code						
Number						
>>>>DL Scrambling	М		9.2.2.13	For DL CPCH	_	
Code				message part		
>>>FDD DL	М		9.2.2.14	For DL CPCH	_	
Channelisation Code				message part		
Number						
>>>PCP Length	M		9.2.2.24A			
>>>>UCSM	C-NCA	1			_	
Information						
>>>>Min UL	М		9.2.2.22		_	
Channelisation Code						
Length						
>>>>NF_max	М		9.2.2.23B			
>>>>Channel		0 <maxa< td=""><td></td><td></td><td>-</td><td></td></maxa<>			-	
Request		PSigNum>				
Parameters		-				
>>>>AP	М		9.2.2.1A		_	
Preamble						
Signature						
>>>>AP Sub	0		9.2.2.1B		-	
Channel Number						
>>>VCAM Mapping	C-CA	1 <maxno< td=""><td></td><td>Refer to TS [18]</td><td>_</td><td></td></maxno<>		Refer to TS [18]	_	
Information		ofLen>				
>>>Min UL	М		9.2.2.22		-	
Channelisation Code						
Length						
>>>NF_max	М		9.2.2.23B		_	
>>>Max Number of	М		9.2.2.20A		-	
PCPCHs						
>>>SF Request		1 <maxa< td=""><td></td><td></td><td>_</td><td></td></maxa<>			_	
	i .		•			

				1	I	I
>>>>AP Preamble Signature	M		9.2.2.1A		_	
>>>>AP Sub	0		9.2.2.1B			
	0		9.2.2.10		_	
Channel Number						
>>>AP-AICH		1			_	
Parameters						
>>>Common	M		9.2.1.13		_	
Physical Channel ID						
>>>FDD DL	M		9.2.2.14		_	
Channelisation Code						
Number						
>>>AP-AICH Power	M		AICH		_	
			Power			
			9.2.2.D			
>>>CSICH Power	М		AICH	For CSICH bits	_	
			Power	at end of AP-		
			9.2.2.D	AICH slot		
>>>STTD Indicator	М		9.2.2.48		_	
>>>CD/CA-ICH		1			_	
Parameters						
>>>Common	М		9.2.1.13		_	
Physical Channel ID						
>>>FDD DL	М		9.2.2.14		_	
Channelisation Code	'*'		0.2.2.11			
Number						
>>>CD/CA-ICH	М		AICH		_	
Power	IVI		Power			
i owei			9.2.2.D			
>>>STTD Indicator	М		9.2.2.48			
	О			Ob all b a		:
>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>Transport Layer	0		9.2.1.63	Shall be	YES	ignore
Address				ignored if		
				bearer		
				establishment		
				with ALCAP.		

Condition	Explanation
SlotFormat	The IE shall be present if the Secondary CCPCH Slot Format IE is set to any of the values from 8 to 17.
CA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to "CA Active".
NCA	The IE shall be present if the <i>Channel Assignment Indication</i> IE is set to "CA Inactive".
PCH	The IE shall be present if the PCH Parameters IE is not present.

Range Bound	Explanation
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH
maxnoofPCPCHs	Maximum number of PCPCHs for a CPCH
maxnoofLen	Maximum number of Min UL Channelisation Code Length
maxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH
maxAPSigNum	Maximum number of AP Signatures

9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE Common Physical Channel To Be Configured	М				YES	ignore
>Secondary CCPCHs					_	
>>SCCPCH CCTrCH ID	М		CCTrCH ID 9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	-	
>>TFCS	М		9.2.1.58	For DL CCTrCH supporting one or several Secondary CCPCHs	-	
>>TFCI Coding	M		9.2.3.22		_	
>>Puncture Limit	М		9.2.1.50		_	
>>CHOICE HCR or LCR	М			See note 1 below	_	
>>>3.84Mcps TDD					_	
>>>>Secondary CCPCH		1 <maxno ofSCCPC Hs></maxno 		See note 2 below	GLOBAL	reject
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>TDD Channelisation Code	M		9.2.3.19		_	
>>>>Time Slot	M		9.2.3.23		_	
>>>>Midamble Shift And Burst Type	М		9.2.3.7		_	
>>>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>>>Repetition Period	М		9.2.3.16		_	
>>>>Repetition Length	М		9.2.3.15		_	
>>>>SCCPCH Power	М		DL Power 9.2.1.21		_	
>>>1.28Mcps TDD					_	
>>>>Secondary CCPCH LCR		1 <maxno ofSCCPC HsLCR></maxno 		See note 2 below	GLOBAL	reject
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		_	
>>>>Time Slot	M		9.2.3.24A		_	

LCD			1	1		
LCR >>>>Midamble	M		9.2.3.7A		_	
>>>>Initial Shift LCR	IVI		9.2.3.1A		_	
>>>>TDD Physical	М		9.2.3.20		_	
Channel Offset						
>>>>Repetition	М		9.2.3.16		_	
Period						
>>>>Repetition	M		9.2.3.15		_	
Length						
>>>>SCCPCH	М		DL Power		_	
Power >>>> SCCPCH	N 4		9.2.1.21			
Time Slot Format	M		TDD DL DPCH Time		_	
LCR			Slot Format			
LOIK			LCR			
			9.2.3.19D			
>>FACH Parameters		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
>>>Common Transport	M	ofFACHs>	9.2.1.14			
Section 1 Channel ID	IVI		9.∠.1.14			
>>>FACH CCTrCH ID	М		CCTrCH ID		_	
			9.2.3.3			
>>>Transport Format	М		9.2.1.59	For the DL.	_	
Set						
>>>ToAWS	M		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60		-	
>>>Max FACH Power	0		DL Power	Applicable to	YES	reject
			9.2.1.21	1.28Mcps TDD only		
>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
>>>Diriding 1D			0.2.1.4	ignored if	120	ignore
				bearer		
				establishment		
				with ALCAP.		
>>>Transport Layer	0		9.2.1.63	Shall be	YES	ignore
Address				ignored if		
				bearer		
				establishment		
>>PCH Parameters		01		with ALCAP.	YES	reject
>>>Common Transport	М	J 1	9.2.1.14		-	10,00
Channel ID						
>>>PCH CCTrCH ID	М		CCTrCH ID		_	
			9.2.3.3			
>>>Transport Format	М		9.2.1.59	For the DL.	_	
Set						
>>>ToAWS	M		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60	Soo note 4	_	
>>>CHOICE <i>HCR</i> or LCR	M			See note 1 below	_	
>>>3.84Mcps TDD				DEIOW	_	
>>>>PICH		01			YES	reject
Parameters						. 5,50
>>>>Common	М		9.2.1.13		_	
Physical Channel						
ID						
>>>>TDD	М		9.2.3.19		_	
Channelisation						

Code						
>>>>Time Slot	М		9.2.3.23		_	
>>>> Midamble	M		9.2.3.7		_	
Shift And Burst	IVI		9.2.3.7		_	
Type	+					
>>>>TDD	М		9.2.3.20		_	
Physical Channel						
Offset						
>>>>Repetition	M		9.2.3.16		_	
Period						
>>>>Repetition	М		9.2.3.15		_	
Length						
>>>>Paging	М		9.2.3.8		_	
Indicator Length	""		0.2.0.0			
	М		0.04.404			
>>>>PICH	IVI		9.2.1.49A		_	
Power						
>>>>1.28Mcps TDD					_	
>>>>PICH		1			YES	reject
Parameters LCR						
>>>>Common	М		9.2.1.13		_	
Physical Channel						
ID						
>>>>TDD	М		9.2.3.19a		_	
Channelisation	""		J.Z.J.15a			
Code LCR	1		000011			
>>>>Time Slot	М		9.2.3.24A		_	
LCR						
>>>>Midamble	M		9.2.3.7A		_	
Shift LCR						
>>>>TDD	М		9.2.3.20		_	
Physical Channel						
Offset						
>>>>Repetition	М		9.2.3.16		_	
Period	""		3.2.3.10			
>>>>Repetition	М		9.2.3.15			
· · · · · · · · · · · · · · · · · · ·	IVI		9.2.3.15		_	
Length	+					
>>>> Paging	М		9.2.3.8		_	
Indicator Length						
>>>>PICH	M		9.2.1.49A		_	
Power						
>>>>Second	M		TDD			
TDD			Channelisat			
Channelisation			ion Code			
Code LCR			LCR			
>>>>TSTD	0		9.2.3.19a 9.2.1.64		YES	roicat
>>>>>151D Indicator			9.2.1.04		150	reject
>>>PCH Power	0		DL Power	Applicable to	YES	roinat
>>>FUT FUWER				Applicable to	150	reject
			9.2.1.21	1.28Mcps TDD		
	-			only		
>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>Transport Layer	0		9.2.1.63	Shall be	YES	ignore
Address				ignored if		
				bearer		
				establishment		
	1			Jotabilorinient	ı	l

			1
		with ALCAP	1
		WITH ALCAP.	

>>TSTD Indicator	0		9.2.1.64		YES	reject
>>MICH Parameters		01			YES	reject
>>>Common Physical	М	_	9.2.1.13		_	
Channel ID						
>>>TDD Physical	М		9.2.3.20		_	
Channel Offset						
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>Notification Indicator	M		9.2.3.7Aa		_	
Length						
>>>MICH Power	M		PICH		_	
			Power			
			9.2.1.49A			
>>>CHOICE HCR or	M				_	
LCR						
>>>3.84Mcps TDD					_	
>>>>MICH		1			YES	reject
Parameters HCR						
>>>>TDD	M		9.2.3.19		_	
Channelisation						
Code						
>>>>Time Slot	M		9.2.3.23		_	
>>>>Midamble	M		9.2.3.7		_	
Shift And Burst						
Туре						
>>>>1.28Mcps TDD					_	
>>>>MICH		1			YES	reject
Parameters LCR						
>>>>TDD	M		9.2.3.19a		_	
Channelisation						
Code LCR						
>>>>Time Slot	M		9.2.3.24A		_	
LCR			0.0074			
>>>>Midamble	M		9.2.3.7A		_	
Shift LCR >>>>Second	M		TDD			
TDD	IVI		Channelisat		_	
Channelisation			ion Code			
Code LCR			LCR			
			9.2.3.19a			
>>>>TSTD	M		9.2.1.64		_	
Indicator						
>PRACH >>CHOICE HCR or LCR	М			See note 1	_	
>>CHOICE HCK 0/ LCK	IVI			below	_	
>>>3.84Mcps TDD				DEIOW	_	
>>>3.64NICPS TDD		1			YES	roicot
>>>PRACH >>>>Common	M	1	9.2.1.13		150	reject
>>>>Common Physical Channel ID	IVI		0.2.1.10			
-	M		9.2.1.58		_	
>>>>TFCS >>>>>Time Slot	M		9.2.3.23		_	
>>>>Time Slot	M		9.2.3.19		_	
Channelisation Code	IVI		0.2.0.10			
	M		9.2.3.6		_	
>>>>Max PRACH Midamble Shifts	M		0.2.0.0			
>>>>PRACH	M		9.2.3.14			
>>>>PRACH Midamble	IVI		3.2.3.14		_	
IVIII CHILIDE		+	1	1	<u> </u>	
>>>>RACH		1			YES	reject

Transport Channel ID						
>>>>Transport Format Set	М		9.2.1.59	For the UL	_	
>>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>1.28Mcps TDD					_	
>>>PRACH LCR		1 <maxno ofPRACHL CRs></maxno 			GLOBAL	reject
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>TFCS	М		9.2.1.58		_	
>>>>Time Slot	М		9.2.3.24A		_	
>>>>TDD Channelisation Code LCR	М		9.2.3.19a		_	
>>>>Midamble Shift LCR	M		9.2.3.7A		_	
>>>>RACH		1			YES	reject
>>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>>Transport Format Set	М		9.2.1.59	For the UL	_	
>>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>FPACH		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>TDD Channelisation Code LCR	М		9.2.3.19a		_	
>>>Time Slot LCR	М		9.2.3.24A			
>>>Midamble Shift LCR	М		9.2.3.7A		_	
>>>Max FPACH Power	М		9.2.3.5E		_	

Note 1: This information element is a simplified representation of the ASN.1. The choice is in reality performed through the use of ProtocolIE-Single-Container within the ASN.1.

Note 2: This information element is a simplified representation of the ASN.1. Repetitions 1 to 8 and repetitions 9 to maxnoofSCCPCHs / maxnoofSCCPCHsLCR are represented by separate ASN.1 structures.

Range Bound	Explanation
maxnoofSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH for 3.84Mcps TDD
maxnoofSCCPCHsLCR	Maximum number of Secondary CCPCHs per CCTrCH for 1.28Mcps TDD
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH
maxnoofPRACHLCRs	Maximum number of PRACHs LCR that can be defined on a RACH for 1.28Mcps TDD

9.1.4 COMMON TRANSPORT CHANNEL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	10,000
FACH Parameters Info		0 <maxno ofFACHs></maxno 		The FACH Parameters may be combined with PCH Parameters	GLOBAL	ignore
>FACH Parameters	M		Common Transport Channel Information Response 9.2.1.14A		-	
PCH Parameters	0		Common Transport Channel Information Response 9.2.1.14A	The PCH Parameters may be combined with FACH Parameters	YES	ignore
RACH Parameters	0		Common Transport Channel Information Response 9.2.1.14A	The RACH Parameters shall not be combined with FACH Parameters or PCH Parameters	YES	ignore
CPCH Parameters	O		Common Transport Channel Information Response 9.2.1.14A	The CPCH Parameters shall not be combined with FACH Parameters or PCH Parameters or RACH Parameters	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation				
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary				
	CCPCH[FDD] / a group of Secondary CCPCHs [TDD]				

9.1.5 COMMON TRANSPORT CHANNEL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	_
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	_
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.6 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	-		
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
CHOICE Common Physical	M				YES	reject
Channel To Be Configured						
>Secondary CCPCH					_	
>>FACH Parameters		0 <maxfa CHCell></maxfa 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>Max FACH Power	0		DL Power 9.2.1.21	Maximum allowed power on the FACH.	_	
>>>ToAWS	0		9.2.1.61		_	
>>>ToAWE	0		9.2.1.60		_	
>>PCH Parameters		01			YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>PCH Power	0		DL Power	Power to be	_	
			9.2.1.21	used on the PCH.		
>>>ToAWS	0		9.2.1.61		_	
>>>ToAWE	0		9.2.1.60		_	
>>PICH Parameters		01			YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>PICH Power	0		9.2.1.49A		_	
>>MICH Parameters		01			YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>MICH Power	0		PICH Power 9.2.1.49A		_	
>PRACH					_	
>>PRACH Parameters		0 <maxp RACHCell</maxp 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>Preamble Signatures	0		9.2.2.31		_	
>>>Allowed Slot Format Information		0 <maxno ofSlotForm atsPRACH ></maxno 			_	
>>>RACH Slot Format	М		9.2.2.37			

>>>RACH Sub Channel	0		9.2.2.38		-	
Numbers		_				
>>AICH Parameters		0 <maxp RACHCell</maxp 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>AICH Power	0		9.2.2.D		_	
>CPCH					_	
>>CPCH Parameters		0 <maxno ofCPCHs></maxno 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		-	
>>>UL SIR	0		9.2.1.67A		_	
>>>Initial DL	0		DL Power		_	
Transmission Power			9.2.1.21			
>>>Maximum DL Power	0		DL Power 9.2.1.21		-	
>>>Minimum DL Power	0		DL Power 9.2.1.21		-	
>>AP-AICH Parameters		0 <maxno ofCPCHs></maxno 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>AP-AICH Power	0		AICH Power 9.2.2.D		-	
>>>CSICH Power	0		AICH Power 9.2.2.D	For CSICH bits at end of AP- AICH slot	-	
>>CD/CA-ICH		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
Parameters		ofCPCHs>				•
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>CD/CA-ICH Power	0		AICH Power 9.2.2.D		_	

Range Bound	Explanation
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxnoofCPCHs	Maximum number of CPCHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs and AICHs that can be defined in a Cell
maxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
Secondary CCPCH Parameters		01			YES	reject

>CCTrCH ID	1.4		0000	For DI		
SCOTICHID	M		9.2.3.3	For DL	_	
				CCTrCH		
				supporting one		
				or several		
				Secondary		
2				CCPCHs		
>Secondary CCPCHs To Be Configured		0 <maxno< td=""><td></td><td>See note 1</td><td>GLOBAL</td><td>reject</td></maxno<>		See note 1	GLOBAL	reject
Be Configured		ofSCCPC		below		
		Hs>				
>>Common Physical Channel ID	М		9.2.1.13		_	
>>SCCPCH Power	0		DL power		_	
			9.2.1.21			
PICH Parameters		01			YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>PICH Power	0		9.2.1.49A		_	
FACH Parameters		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
Common Transport	1	ofFACHs>				
>Common Transport Channel ID	М		9.2.1.14		-	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60			
>Max FACH Power	0		DL Power 9.2.1.21	Applicable to 1.28Mcps TDD only	YES	reject
PCH Parameters		01		y	YES	reject
>Common Transport Channel ID	М		9.2.1.14		-	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>PCH Power	0		DL Power	Applicable to	YES	reject
			9.2.1.21	1.28Mcps TDD only	120	rojoot
FPACH Parameters		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>Max FPACH Power	0		9.2.3.5E		_	
MICH Parameters		01			YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	,
>MICH Power	0		PICH Power 9.2.1.49A		-	

Note 1: This information element is a simplified representation of the ASN.1. Repetitions 1 to 8 and repetitions 9 to maxnoofSCCPCHs are represented by separate ASN.1 structures. Furthermore, maxnoofSCCPCHs has different values in the ASN.1 for each of the two TDD options.

Range Bound	Explanation
maxnoofSCCPCHs	Maximum number of SCCPCHs that can be repeated in a Cell
maxnoofFACHs	Maximum number of FACHs that can be repeated in a Cell

9.1.7 COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.8 COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.9 COMMON TRANSPORT CHANNEL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Common Physical Channel ID	M		9.2.1.13	Indicates the Common Physical Channel for which the Common Transport Channels (together with the Common Physical Channel) shall be deleted.	YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject

9.1.10 COMMON TRANSPORT CHANNEL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.11 BLOCK RESOURCE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Blocking Priority Indicator	M		9.2.1.5		YES	reject
Shutdown Timer	C- BlockNorm al		9.2.1.56		YES	reject

Condition	Explanation
BlockNormal	The IE shall be present if the Blocking Priority Indicator IE indicates
	'Normal Priority'.

9.1.12 BLOCK RESOURCE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.13 BLOCK RESOURCE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.14 UNBLOCK RESOURCE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	ignore

9.1.15 AUDIT REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	

9.1.16 AUDIT REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Start Of Audit Sequence Indicator	М		9.2.1.56B		YES	reject

9.1.17 AUDIT RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
End Of Audit Sequence Indicator	M		9.2.1.29A		YES	ignore
Cell Information		0 <maxce IlinNodeB></maxce 			EACH	ignore
>C-ID	M		9.2.1.9		_	
>Configuration Generation ID	M		9.2.1.16		-	
>Resource Operational State	M		9.2.1.52		_	
>Availability Status	M		9.2.1.2		_	
>Local Cell ID	M		9.2.1.38	The local cell that the cell is configured on	_	
>Primary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to FDD only	YES	ignore
>Secondary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to FDD only	YES	ignore
>Primary CPICH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to FDD only	YES	ignore
>Secondary CPICH Information		0 <maxs CPICHCell</maxs 		Applicable to FDD only	EACH	ignore
>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		_	
>Primary CCPCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>BCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>Secondary CCPCH		0 <maxs< td=""><td></td><td>See note 1</td><td>EACH</td><td>ignore</td></maxs<>		See note 1	EACH	ignore

Information		CCPCHCe		below		
0 1 2222:		<i>II></i>				
>>Secondary CCPCH Individual Information	M		Common		_	
			Physical Channel			
			Status			
			Information			
			9.2.1.13A			
>PCH Information	0		Common		YES	ignore
			Transport Channel			
			Status			
			Information			
>PICH Information	+_		9.2.1.14B			
>PICH information	0		Common Physical		YES	ignore
			Channel			
			Status			
			Information			
>FACH Information		0 <maxfa< td=""><td>9.2.1.13A</td><td></td><td>EACH</td><td>ignore</td></maxfa<>	9.2.1.13A		EACH	ignore
		CHCell>			2,011	ignore
>>FACH Individual	М		Common		_	
Information			Transport			
			Channel			
			Status			
			Information			
>PRACH Information		0 <maxp< td=""><td>9.2.1.14B</td><td></td><td>FACIL</td><td>:</td></maxp<>	9.2.1.14B		FACIL	:
>		RACHCell			EACH	ignore
		>				
>>PRACH Individual	М		Common		_	
Information			Physical			
			Channel			
			Status			
			Information			
>RACH Information		0 .mayD	9.2.1.13A		FACIL	: mm = m=
>NAOTI IIITOTIII attorii		0 <maxr ACHCell></maxr 			EACH	ignore
>>RACH Individual	М	7.07.00	Common		_	
Information			Transport			
			Channel			
			Status			
			Information			
>AICH Information		0 <maxp< td=""><td>9.2.1.14B</td><td>Applicable to</td><td>EACH</td><td>ianoro</td></maxp<>	9.2.1.14B	Applicable to	EACH	ianoro
ZAGIT IIIOTIIIGUOII		V <maxp RACHCell</maxp 		FDD only	EACH	ignore
		>		1 DD Only		
>>AICH Individual	М		Common		_	
Information			Physical			
			Channel			
			Status			
			Information			
>PCPCH Information		0 <maxp< td=""><td>9.2.1.13A</td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxp<>	9.2.1.13A	Applicable to	EACH	ignore
		CPCHCell		FDD only	EACH	ignore
		>		, DD Only		
>>PCPCH Individual	М		Common		-	
Information			Physical			
			Channel			

	1	1		1		
			Status			
			Information			
			9.2.1.13A			
>CPCH Information		0 <maxc PCHCell></maxc 		Applicable to FDD only	EACH	ignore
>>CPCH Individual	М		Common	- 7	_	
Information			Transport			
			Channel			
			Status			
			Information			
			9.2.1.14B			
>AP-AICH Information		0 <maxc PCHCell></maxc 		Applicable to FDD only	EACH	ignore
>>AP-AICH Individual	М	1 01100112	Common	1 DD Grilly	_	
Information			Physical			
			Channel			
			Status			
			Information			
			9.2.1.13A			
>CD/CA-ICH Information		0 <maxc< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxc<>		Applicable to	EACH	ignore
		PCHCell>		FDD only		J 3.12
>>CD/CA-ICH Individual	М		Common		_	
Information			Physical			
			Channel			
			Status			
			Information			
00111.6			9.2.1.13A			
>SCH Information	0		Common	TDD Sync	YES	ignore
			Physical	Channel		
			Channel	Applicable to		
			Status	3.84Mcps TDD		
			Information	only		
>FPACH Information			9.2.1.13A	A 11 11 1	E4011	
>FPACH information		0 <maxfp< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfp<>		Applicable to	EACH	ignore
		ACHCell>		1.28Mcps TDD		
>>FPACH Individual	M		Common	only		
Information	IVI		Physical		_	
-			Channel			
			Status			
			Information			
			9.2.1.13A			
		i	J.Z. I. IJA	1		
>DwPCH Information	0		Common	Applicable to	YES	ianore
>DwPCH Information	0		Common Physical	Applicable to 1.28Mcps TDD	YES	ignore
>DwPCH Information	0		Physical	1.28Mcps TDD	YES	ignore
>DwPCH Information	0		Physical Channel		YES	ignore
>DwPCH Information	0		Physical Channel Status	1.28Mcps TDD	YES	ignore
>DwPCH Information	0		Physical Channel Status Information	1.28Mcps TDD	YES	ignore
>HS-DSCH Resources	0	01	Physical Channel Status	1.28Mcps TDD	YES	ignore
>HS-DSCH Resources Information >>Resource Operational	O M	01	Physical Channel Status Information	1.28Mcps TDD		-
>HS-DSCH Resources Information	M	01	Physical Channel Status Information 9.2.1.13A	1.28Mcps TDD		-
>HS-DSCH Resources Information >>Resource Operational State	M M	01	Physical Channel Status Information 9.2.1.13A	1.28Mcps TDD	YES - -	ignore
>HS-DSCH Resources Information >>Resource Operational State >>Availability Status	M	01	Physical Channel Status Information 9.2.1.13A 9.2.1.52	1.28Mcps TDD		-
>HS-DSCH Resources Information >>Resource Operational State >>Availability Status	M M	01	Physical Channel Status Information 9.2.1.13A 9.2.1.52 9.2.1.2 Common Physical Channel	1.28Mcps TDD	YES - -	ignore
>HS-DSCH Resources Information >>Resource Operational State >>Availability Status	M M	01	Physical Channel Status Information 9.2.1.13A 9.2.1.52 9.2.1.2 Common Physical Channel Status	1.28Mcps TDD	YES - -	ignore
>HS-DSCH Resources Information >>Resource Operational State >>Availability Status	M M	01	Physical Channel Status Information 9.2.1.13A 9.2.1.52 9.2.1.2 Common Physical Channel	1.28Mcps TDD	YES - -	ignore

Information						
>>Resource Operational	М		9.2.1.52		_	
State			0.2.1.02			
>>Availability Status	М		9.2.1.2		_	
Communication Control Port Information		0 <maxc CPinNode B></maxc 			EACH	ignore
>Communication Control Port ID	М		9.2.1.15		_	
>Resource Operational State	М		9.2.1.52		_	
>Availability Status	М		9.2.1.2		_	
Local Cell Information		0 <maxlo calCellinN odeB></maxlo 			EACH	ignore
>Local Cell ID	М		9.2.1.38		_	
>DL Or Global Capacity	М		9.2.1.20B		_	
Credit		1				
>UL Capacity Credit	0		9.2.1.65A		_	
>Common Channels Capacity Consumption Law	М		9.2.1.9A		-	
>Dedicated Channels Capacity Consumption Law	М		9.2.1.20A		-	
>Maximum DL Power Capability	0		9.2.1.39		_	
>Minimum Spreading Factor	0		9.2.1.47		_	
>Minimum DL Power Capability	0		9.2.1.46A		1	
>Local Cell Group ID	0		9.2.1.37A		_	
>Reference Clock Availability	0		9.2.3.14A	TDD only	YES	ignore
>Power Local Cell Group ID	0		9.2.1.49B		YES	ignore
>HSDPA Capability	0		9.2.1.31Ga		YES	ignore
>E-DCH Capability	0		9.2.1.29aa		YES	ignore
Local Cell Group Information		0 <maxlo calCellinN odeB></maxlo 			EACH	ignore
>Local Cell Group ID	М		9.2.1.37A		_	
>DL Or Global Capacity Credit	М		9.2.1.20B		-	
>UL Capacity Credit	0		9.2.1.65A		_	
>Common Channels Capacity Consumption Law	M		9.2.1.9A		_	
>Dedicated Channels Capacity Consumption Law	М		9.2.1.20A		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Power Local Cell Group Information		0 <maxlo calCellinN odeB></maxlo 			EACH	ignore
>Power Local Cell Group ID	М		9.2.1.49B		_	
>Maximum DL Power Capability	M		9.2.1.39		-	

Note 1: This information element is a simplified representation of the ASN.1. [TDD – Repetitions 1 to 8 and repetitions 9 to maxSCCPCHCell are represented by separate ASN.1 structures.] Furthermore, maxSCCPCHCell has different values in the ASN.1 for FDD and for each of the two TDD options.

Range Bound	Explanation
maxCellinNodeB	Maximum number of Cells that can be configured in Node B
maxCCPinNodeB	Maximum number of Communication Control Ports that can exist in the Node B
maxCPCHCell	Maximum number of CPCHs that can be defined in a Cell
maxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
maxPCPCHCell	Maximum number of PCPCHs that can be defined in a Cell
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
maxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs that can be defined in a Cell
maxRACHCell	Maximum number of RACHs that can be defined in a Cell
maxFPACHCell	Maximum number of FPACHs that can be defined in a Cell

9.1.17A AUDIT FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality diagnostics	0	•	9.2.1.17		YES	ignore

9.1.18 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	10,000
Measurement ID	M		9.2.1.42		YES	reject
CHOICE Common	M		3.2.1.42		YES	reject
Measurement Object Type	IVI				123	reject
>Cell						
>>C-ID	N /		9.2.1.9		_	
>>Time Slot	O			Applicable to	_	
>>Time Slot	0		9.2.3.23	Applicable to 3.84Mcps TDD only	_	
>>Time Slot LCR	0		9.2.3.24A	Applicable to 1.28Mcps TDD only	YES	reject
>>Neighbouring Cell Measurement Information		0 <maxno MeasNCell s></maxno 			GLOBAL	ignore
>>>CHOICE					_	
Neighbouring Cell Measurement Information						
>>>Neighbouring				FDD only	_	
FDD Cell Measurement Information				1 22 01,		
>>>>Neighbouring	M		9.2.1.47C		_	
FDD Cell Measurement						
Information						
>>>Neighbouring TDD Cell Measurement				Applicable to 3.84Mcps TDD only	_	
Information >>>>Neighbouring TDD Cell Measurement	M		9.2.1.47D		_	
Information						
>>>>Additional Neighbouring Cell Measurement Information					_	
>>>>Neighbouring TDD Cell Measurement Information LCR				Applicable to 1.28Mcps TDD only	-	
>>>>>Neighbouri ng TDD Cell Measurement Information LCR	M		9.2.1.47E		YES	reject
>RACH				FDD only	_	
>>C-ID	М		9.2.1.9		_	
>>Common Transport Channel ID	М		9.2.1.14		_	
>CPCH				FDD only	_	
>>C-ID	М		9.2.1.9	•	_	
>>Common Transport Channel ID	М		9.2.1.14		_	
>>Spreading Factor	0		Minimum UL Channelisat ion Code Length		-	

		9.2.2.22		
>Additional Common Measurement Object Types			-	
>>Power Local Cell Group			_	
>>>Power Local Cell Group ID	М	9.2.1.49B	YES	reject
Common Measurement Type	M	9.2.1.11	YES	reject
Measurement Filter Coefficient	0	9.2.1.41	YES	reject
Report Characteristics	M	9.2.1.51	YES	reject
SFN Reporting Indicator	M	FN Reporting Indicator 9.2.1.29B	YES	reject
SFN	0	9.2.1.53A	YES	reject
Common Measurement Accuracy	0	9.2.1.9B	YES	reject
Measurement Recovery Behavior	0	9.2.1.43A	YES	ignore

Range Bound	Explanation
maxnoMeasNCells	Maximum number of neighbouring cells that can be measured on.

9.1.19 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	•
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common Measurement Object Type	0			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>Cell					_	
>>Common Measurement Value	М		9.2.1.12		_	
>RACH				FDD only	_	
>>Common Measurement Value	М		9.2.1.12		_	
>CPCH				FDD only	_	
>>Common Measurement Value	М		9.2.1.12		_	
>Additional Common Measurement Object Types					_	
>>Power Local Cell Group					_	
>>>Common Measurement Value	М		9.2.1.12		YES	ignore
SFN	0		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Common Measurement Achieved Accuracy	0		Common Measureme nt Accuracy 9.2.1.9B		YES	ignore
Measurement Recovery Support Indicator	0		9.2.1.43C		YES	ignore

9.1.20 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.21 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common Measurement Object Type	М			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>Cell					_	
>>Common Measurement Value Information	М		9.2.1.12A		-	
>RACH				FDD only	_	
>>Common Measurement Value Information	М		9.2.1.12A		_	
>CPCH				FDD only	_	
>>Common Measurement Value Information	М		9.2.1.12A		_	
>Additional Common Measurement Object Types					_	
>>Power Local Cell Group					_	
>>>Common Measurement Value Information	М		9.2.1.12A		YES	ignore
SFN	0		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Measurement Recovery Reporting Indicator	0		9.2.1.43B		YES	ignore

9.1.22 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.23 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.24 CELL SETUP REQUEST

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
T Cell	M		9.2.2.49		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nu [14]	YES	reject
UARFCN	M		9.2.1.65	Corresponds to	YES	reject

Maximum Transmission Power	М		9.2.1.40	YES	reject
Closed Loop Timing Adjustment Mode	0		9.2.2.2A	YES	reject
Primary Scrambling Code	M		9.2.2.34	YES	reject
Synchronisation	IVI	1	9.2.2.34	YES	reject
Configuration		,		ILS	reject
>N_INSYNC_IND	М		9.2.1.47A		
>N_OUTSYNC_IND	M		9.2.1.47B	_	
>T_RLFAILURE	M		9.2.1.56A		
DL TPC Pattern 01 Count	M		9.2.2.13A	YES	reject
Primary SCH Information	IVI	1	0.2.2.10/1	YES	reject
>Common Physical	М	,	9.2.1.13	-	TOJOOL
Channel ID	'*'		0.2.1.10		
>Primary SCH Power	М		DL Power	_	
7 · · · · · · · · · · · · · · · · · · ·			9.2.1.21		
>TSTD Indicator	М		9.2.1.64	_	
Secondary SCH Information		1	0.20	YES	reject
>Common Physical	М	,	9.2.1.13		. 0,001
Channel ID					
>Secondary SCH Power	М		DL Power	_	
2222220., 22.11.0110.			9.2.1.21		
>TSTD Indicator	М		9.2.1.64	_	
Primary CPICH Information		1	-	YES	reject
>Common Physical	М		9.2.1.13		-,
Channel ID			0.2		
>Primary CPICH power	М		9.2.2.33	_	
>Transmit Diversity	M		9.2.2.53	_	
Indicator					
Secondary CPICH		0 <maxs< td=""><td></td><td>EACH</td><td>reject</td></maxs<>		EACH	reject
Information		CPICHCell >			,,,,,,
>Common Physical	М		9.2.1.13		
Channel ID	IVI		9.2.1.13		
>DL Scrambling Code	М		9.2.2.13		
>FDD DL Channelisation	M		9.2.2.14		
Code Number	IVI		3.2.2.17		
>Secondary CPICH Power	М		DL Power		
>occordary or form ower	'*'		9.2.1.21		
>Transmit Diversity	М		9.2.2.53	_	
Indicator	'''		0.2.2.00		
Primary CCPCH Information		1		YES	reject
>Common Physical	M		9.2.1.13		
Channel ID	IVI		J.L.1.13	_	
>BCH Information		1			
>>Common Transport	M	,	9.2.1.14		
Channel ID	141		0.2.1.17	_	
>>BCH Power	М		DL Power		
7750.71 OWO!	'*'		9.2.1.21		
>STTD Indicator	М		9.2.2.48	_	
Limited Power Increase	141	1	J. Z. Z. TU	YES	reject
Information		•		0	.0,000
>Power_Raise_Limit	М		9.2.2.29A	_	
>DL_power_averaging_win	M		9.2.2.12A	_	
dow size	"				
dow_size IPDL Parameter Information	101	01		YES	reiect
IPDL Parameter Information		01	9.2.2.18C	YES -	reject
IPDL Parameter Information >IPDL FDD Parameters	M	01	9.2.2.18C 9.2.1.36F	YES - -	reject
IPDL Parameter Information >IPDL FDD Parameters >IPDL Indicator	M		9.2.2.18C 9.2.1.36F	- -	
IPDL Parameter Information >IPDL FDD Parameters >IPDL Indicator PDSCH information	M M	01	9.2.1.36F	YES YES	reject
IPDL Parameter Information >IPDL FDD Parameters >IPDL Indicator PDSCH information >Maximum PDSCH Power	M	01		- - YES -	reject
IPDL Parameter Information >IPDL FDD Parameters >IPDL Indicator PDSCH information	M M	01 0 <maxno ofcellporti<="" td=""><td>9.2.1.36F</td><td>- -</td><td></td></maxno>	9.2.1.36F	- -	
IPDL Parameter Information >IPDL FDD Parameters >IPDL Indicator PDSCH information >Maximum PDSCH Power Cell Portion Information	M M	01 0 <maxno< td=""><td>9.2.1.36F 9.2.2.21A</td><td>- YES - EACH</td><td>reject</td></maxno<>	9.2.1.36F 9.2.2.21A	- YES - EACH	reject
IPDL Parameter Information >IPDL FDD Parameters >IPDL Indicator PDSCH information >Maximum PDSCH Power	M M	01 0 <maxno ofcellporti<="" td=""><td>9.2.1.36F</td><td>- - YES -</td><td>reject</td></maxno>	9.2.1.36F	- - YES -	reject

175

CPICH		Physical		
		Channel ID		
		9.2.1.13		

Range Bound	Explanation
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.

9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	-		-
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	M		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15]	YES	reject
Cell Parameter ID	M		9.2.3.4		YES	reject
Maximum Transmission Power	M		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26		YES	reject
Sync Case	М		9.2.3.18		YES	reject
Synchronisation Configuration		1			YES	reject
>N_INSYNC_IND	М		9.2.1.47A		_	
>N_OUTSYNC_IND	М		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A		_	
DPCH Constant Value	M	1	Constant	This IE shall be	YES	reject
Di Ci i Constant value	IVI		Value 9.2.3.4A	ignored by the Node B.	123	16,661
PUSCH Constant Value	М		Constant	This IE shall be	YES	reject
T GGGT GGTIGGGTT VAIGG			Value 9.2.3.4A	ignored by the Node B.		10,000
PRACH Constant Value	М		Constant	This IE shall be	YES	reject
			Value 9.2.3.4A	ignored by the Node B.		,
Timing Advance Applied	М		9.2.3.22A		YES	reject
SCH Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>CHOICE Sync Case	M				YES	reject
>>Case 1					_	
>>>Time Slot	M		9.2.3.23		_	
>>Case 2					_	
>>>SCH Time Slot	M		9.2.3.17		_	
>SCH Power	M		DL Power 9.2.1.21		_	
>TSTD Indicator	M		9.2.1.64		_	
PCCPCH Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>TDD Physical Channel Offset	M		9.2.3.20		_	
>Repetition Period	M		9.2.3.16		_	
>Repetition Length	M		9.2.3.15		_	
>PCCPCH Power	M		9.2.3.9		-	
>SCTD Indicator	M		9.2.3.30		_	
Time Slot Configuration		015		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps	GLOBAL	reject

				TDD.		
>Time Slot	М		9.2.3.23		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
Time Slot Configuration LCR		07		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
PCCPCH Information LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>TDD Physical Channel Offset	M		9.2.3.20		_	
>Repetition Period	M		9.2.3.16		_	
>Repetition Length	М		9.2.3.15		_	
>PCCPCH Power	M		9.2.3.9		_	
>SCTD Indicator	M		9.2.3.30		_	
>TSTD Indicator	M		9.2.1.64		_	
DwPCH Information		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>TSTD Indicator	M		9.2.1.64		_	
>DwPCH Power	М		9.2.3.5B		_	
Reference SFN Offset	0		9.2.3.14B		YES	ignore
IPDL Parameter Information		01		Applicable to 3.84 Mcps TDD only	YES	reject
>IPDL TDD Parameters	М		9.2.3.5D		_	
>IPDL Indicator	М		9.2.1.36F		_	
IPDL Parameter Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	М		9.2.3.5H		_	
>IPDL Indicator	М		9.2.1.36F		_	

9.1.25 CELL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.26 CELL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.27 CELL RECONFIGURATION REQUEST

9.1.27.1 FDD Message

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	-
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Maximum Transmission Power	0		9.2.1.40		YES	reject
Synchronisation		01			YES	reject
Configuration		01			163	reject
>N_INSYNC_IND	M		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A			
Primary SCH Information	IVI	01	3.2.1.30A		YES	reject
>Common Physical Channel ID	М	01	9.2.1.13		-	10,000
>Primary SCH Power	М		DL Power 9.2.1.21		_	
Secondary SCH Information		01			YES	reject
>Common Physical Channel ID	М		9.2.1.13		-	,
>Secondary SCH Power	М		DL Power 9.2.1.21		_	
Primary CPICH Information		01			YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>Primary CPICH Power	М		9.2.2.33		_	
Secondary CPICH	101	0 <maxs< td=""><td>0.2.2.00</td><td></td><td>EACH</td><td>reject</td></maxs<>	0.2.2.00		EACH	reject
Information		CPICHCell >				. 5,551
>Common Physical Channel ID	М		9.2.1.13		_	
>Secondary CPICH Power	М		DL Power 9.2.1.21		_	
Primary CCPCH Information		01			YES	reject
>BCH Information		1			_	
>>Common Transport Channel ID	М		9.2.1.14		_	
>>BCH Power	М		DL Power 9.2.1.21		_	
IPDL Parameter Information		01			YES	reject
>IPDL FDD Parameters	0		9.2.2.18C		_	1
>IPDL Indicator	M		9.2.1.36F		_	
PDSCH information		01			YES	reject
>Maximum PDSCH Power	M		9.2.2.21A		_	

Range Bound	Explanation
maxSCPICHCell	Maximum number of Secondary CPICH that can be defined in a Cell.

9.1.27.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Synchronisation Configuration		01			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A		_	
Timing Advance Applied	0		9.2.3.22A		YES	reject
SCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>SCH Power	M		DL Power 9.2.1.21		_	
PCCPCH Information		01			YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>PCCPCH Power	M		9.2.3.9		_	
Maximum Transmission Power	0		9.2.1.40		YES	reject
DPCH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PUSCH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PRACH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
Time Slot Configuration		015		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	М		9.2.3.23		_	
>Time Slot Status	М		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
Time Slot Configuration LCR		07		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	М	ļ <u></u>	9.2.3.24		-	
DwPCH Information		01		Applicable to 1.28Mcps TDD only.	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>DwPCH Power	М		9.2.3.5B		_	
IPDL Parameter Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>IPDL TDD Parameters	0		9.2.3.5D		_	
>IPDL Indicator	M		9.2.1.36F		_	
IPDL Parameter Information		01		Applicable to	YES	reject

LCR			1.28Mcps TDD		
			only		
>IPDL TDD Parameters LCR	0	9.2.3.5H		_	
>IPDL Indicator	M	9.2.1.36F		_	

9.1.28 CELL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and	Semantics description	Criticality	Assigned Criticality
			Reference			
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.29 CELL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.30 CELL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M	•	9.2.1.9		YES	reject

9.1.31 CELL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0	•	9.2.1.17		YES	ignore

9.1.32 RESOURCE STATUS INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CHOICE Indication Type	M				YES	ignore
>No Failure					_	
>>Local Cell Information		1 <max LocalCellin NodeB></max 			EACH	ignore
>>>Local Cell ID	M		9.2.1.38		_	
>>>Add/Delete Indicator	M		9.2.1.1		_	
>>>DL Or Global Capacity Credit	C-add		9.2.1.20B		_	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	C-add		9.2.1.9A		_	
>>>Dedicated Channels Capacity Consumption Law	C-add		9.2.1.20A		_	
>>>Maximum DL Power Capability	C-add		9.2.1.39		_	
>>>Minimum Spreading Factor	C-add		9.2.1.47		_	
>>>Minimum DL Power Capability	C-add		9.2.1.46A		_	
>>>Local Cell Group ID	0		9.2.1.37A		_	
>>>Reference Clock Availability	0		9.2.3.14A	TDD only	YES	ignore
>>>Power Local Cell Group ID	0		9.2.1.49B		YES	ignore
>>>HSDPA Capability	0		9.2.1.31Ga		YES	ignore
>>>E-DCH Capability	0		9.2.1.29aa		YES	ignore
>>Local Cell Group Information		0 <maxlo calCellinN odeB></maxlo 			EACH	ignore
>>>Local Cell Group ID	M		9.2.1.37A		_	
>>>DL Or Global Capacity Credit	М		9.2.1.20B		_	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	М		9.2.1.9A		_	
>>>Dedicated Channels Capacity Consumption Law	М		9.2.1.20A		-	
>>Power Local Cell Group Information		0 <maxlo calCellinN odeB></maxlo 			EACH	ignore
>>>Power Local Cell Group ID	М		9.2.1.49B		_	
>>>Maximum DL Power Capability	М		9.2.1.39		_	
>Service Impacting					_	
>>Local Cell Information		0 <maxlo< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxlo<>			EACH	ignore

		calCellinN			1	
		odeB>				
>>>Local Cell ID	М		9.2.1.38		_	
>>>DL Or Global	0		9.2.1.20B		_	
Capacity Credit						
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels	0		9.2.1.9A		_	
Capacity Consumption						
Law						
>>>Dedicated Channels	0		9.2.1.20A		_	
Capacity Consumption						
Law			0.04.00			
>>>Maximum DL Power	0		9.2.1.39		_	
Capability	0		9.2.1.47			
>>>Minimum Spreading			9.2.1.47			
Factor >>>Minimum DL Power	0		9.2.1.46A		_	
>>>winimum bb Power Capability			9.2.1.40A			
>>>Reference Clock	0		9.2.3.14A	TDD only	YES	ignore
Availability			0.2.0.1 17	100 only	120	ignore
>>>HSDPA Capability	0		9.2.1.31Ga		YES	ignore
>>>E-DCH Capability	0		9.2.1.29aa		YES	ignore
>>Local Cell Group		0 <maxlo< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxlo<>			EACH	ignore
Information		calCellinN				
	M	odeB>	9.2.1.37A			
>>>Local Cell Group ID	0		9.2.1.37A 9.2.1.20B		_	
>>>DL Or Global			9.2.1.206		_	
Capacity Credit	0		9.2.1.65A		_	
>>>UL Capacity Credit >>>Common Channels	0		9.2.1.9A		 	
>>>Common Channels Capacity Consumption			3.2.1.3A			
Law						
>>>Dedicated Channels	0		9.2.1.20A		_	
Capacity Consumption						
Law						
>>Communication		0 <maxc< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxc<>			EACH	ignore
Control Port Information		CPinNode				
		B>				
>>>Communication	M		9.2.1.15		_	
Control Port ID						
>>>Resource	М		9.2.1.52		_	
Operational State						
>>>Availability Status	М		9.2.1.2		_	
>>Cell Information		0 <maxce< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxce<>			EACH	ignore
		llinNodeB>	0.04.0			
>>>C-ID	M		9.2.1.9		_	
>>>Resource	0		9.2.1.52		_	
Operational State			9.2.1.2		1	
>>>Availability Status	0		9.2.1.2 Common	FDD only	YES	ianoro
>>>Primary SCH			Physical	FUD ONLY	YES	ignore
Information			Channel			
			Status			
			Information			
			9.2.1.13A	EDD only	VEC	ianass
>>>Secondary SCH	0		Common Physical	FDD only	YES	ignore
Information			Channel			
			Status			
			Information			

			9.2.1.13A			
>>>Primary CPICH Information	0		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary CPICH Information		0 <maxs CPICHCell ></maxs 		FDD only	EACH	ignore
>>>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>>>Primary CCPCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>BCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>Secondary CCPCH Information		0 <max\$ CCPCHCe II></max\$ 		See note 1 below	EACH	ignore
>>>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>>>PCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>PICH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>FACH Information		0 <maxfa CHCell></maxfa 			EACH	ignore
>>>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		-	
>>>PRACH Information		0 <maxp RACHCell ></maxp 			EACH	ignore
>>>>PRACH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>RACH Information		0 <maxp RACHCell</maxp 			EACH	ignore

		>				
>>>>RACH Individual Information	М		Common Transport Channel Status Information 9.2.1.14B		-	
>>>AICH Information		0 <maxp RACHCell ></maxp 		FDD only	EACH	ignore
>>>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>>>PCPCH Information		0 <maxp CPCHCell ></maxp 		FDD only	EACH	ignore
>>>>PCPCH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>CPCH Information		0 <maxc PCHCell></maxc 	0.2	FDD only	EACH	ignore
>>>>CPCH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		-	
>>>AP-AICH Information		0 <maxc PCHCell></maxc 		FDD only	EACH	ignore
>>>AP-AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>>>CD/CA-ICH Information		0 <maxc PCHCell></maxc 		FDD only	EACH	ignore
>>>>CD/CA-ICH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	Applicable to 3.84Mcps TDD only	YES	ignore
>>>FPACH Information		0 <maxfp ACHCell></maxfp 		Applicable to 1.28Mcps TDD only	EACH	ignore
>>>>FPACH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>DwPCH Information	0		Common Physical Channel	Applicable to 1.28Mcps TDD only	YES	ignore

>>>HS-DSCH		01	Status Information 9.2.1.13A	YES	ignore
Resources Information					
>>>Resource Operational State	М		9.2.1.52	_	
>>>Availability Status	M		9.2.1.2	_	
>>>MICH Information	0		Common Physical Channel Status Information 9.2.1.13A	YES	ignore
>>>E-DCH Resources Information		01		YES	ignore
>>>>Resource Operational State	М		9.2.1.52	_	
>>>Availability Status	М		9.2.1.2	_	
>>Power Local Cell Group Information		0 <maxlo calCellinN odeB></maxlo 		EACH	ignore
>>>Power Local Cell Group ID	М		9.2.1.49B		
>>>Maximum DL Power Capability	М		9.2.1.39	_	
Cause	0		9.2.1.6	YES	ignore

Note 1: This information element is a simplified representation of the ASN.1. [TDD – Repetitions 1 to 8 and repetitions 9 to maxSCCPCHCell are represented by separate ASN.1 structures.] Furthermore, maxSCCPCHCell has different values in the ASN.1 for FDD and for each of the two TDD options.

Condition	Explanation
add	The IE shall be present if the Add/Delete Indicator IE is set to 'Add'.

Range Bound	Explanation
maxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
maxCellinNodeB	Maximum number of C-IDs that can be configured in the Node B
maxCPCHCell	Maximum number of CPCHs that can be defined in a Cell
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
maxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPCPCHCell	Maximum number of PCPCHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs and AICHs that can be defined in a Cell
maxCCPinNodeB	Maximum number of Communication Control Ports that can exist in the
	Node B
maxFPACHCell	Maximum number of FPACHs that can be defined in a Cell

9.1.33 SYSTEM INFORMATION UPDATE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	

	T		100110	1	\/=0	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		1	
C-ID	M		9.2.1.9		YES	reject
BCCH Modification Time	0		9.2.1.3		YES	reject
MIB/SB/SIBInformation		1 <maxib< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxib<>			GLOBAL	reject
>IB Type	M		9.2.1.35		_	
>IB OC ID	M		9.2.1.31A	In one message, every occurrence of IB Type can only be deleted once and/or added once.	ľ	
>CHOICE IB Deletion Indicator	M				_	
>>No Deletion					_	
>>>SIB Originator	C-SIB		9.2.1.55		_	
>>>IB SG REP	0		9.2.1.34		_	
>>>Segment Information		1 <maxib SEG></maxib 			GLOBAL	reject
>>>IB SG POS	0		9.2.1.33		1	
>>>Segment Type	C- CRNCOrig ination		9.2.1.53B		-	
>>>>IB SG DATA	C- CRNCOrig ination		9.2.1.32		-	
>>Deletion			NULL		_	

Range bound	Explanation
maxIB	Maximum number of information Blocks supported in one message
maxIBSEG	Maximum number of segments for one Information Block

Condition	Explanation
CRNCOrigination	The IE shall be present if the SIB Originator IE is set to 'CRNC' or if the
	IB Type IE is set to "MIB', "SB1' or "SB2'.
SIB	The IE shall be present if the IB Type IE is set to "SIB".

9.1.34 SYSTEM INFORMATION UPDATE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.35 SYSTEM INFORMATION UPDATE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.36 RADIO LINK SETUP REQUEST

9.1.36.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M		9.2.2.59		_	
>Min UL Channelisation	M		9.2.2.22		_	
Code Length						
>Max Number of UL	C-		9.2.2.21		_	
DPDCHs	CodeLen					
>Puncture Limit	М		9.2.1.50	For UL	_	
>TFCS	М		9.2.1.58	For UL	_	
>UL DPCCH Slot Format	М		9.2.2.57		_	
>UL SIR Target	М		UL SIR 9.2.1.67A		_	
>Diversity Mode	M		9.2.2.9		_	
>SSDT Cell ID Length	0		9.2.2.45		_	
>S Field Length	0		9.2.2.40		_	
>DPC Mode	0		9.2.2.13C		YES	reject
>UL DPDCH Indicator For	C-		9.2.2.61		YES	reject
E-DCH Operation	ifEDPCHIn fo					
DL DPCH Information		01			YES	reject
>TFCS	М		9.2.1.58	For DL	_	
>DL DPCH Slot Format	M		9.2.2.10		_	
>TFCI Signalling Mode	M		9.2.2.50		_	
>TFCI Presence	C- SlotFormat		9.2.1.57		_	
>Multiplexing Position	М		9.2.2.23		_	
>PDSCH RL ID	C-DSCH		RL ID		_	
			9.2.1.53			
>PDSCH Code Mapping	C-DSCH		9.2.2.25		_	
>Power Offset		1			_	
Information						
>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>PO2	М		Power Offset 9.2.2.29	Power offset for the TPC bits	_	
>>PO3	M		9.2.2.29 Power	Power offset for		
<i>>></i> ΓΟ3	141		Offset 9.2.2.29	the pilot bits	_	
>FDD TPC DL Step Size	М		9.2.2.16		_	
>Limited Power Increase	M		9.2.2.18A		_	
>Inner Loop DL PC Status	M		9.2.2.18B		_	
DCH Information	M		DCH FDD Information 9.2.2.4D		YES	reject
DSCH Information	0		DSCH FDD Information		YES	reject

			9.2.2.13B			
TFCI2 Bearer Information		01			YES	ignore
>ToAWS	М		9.2.1.61			
>ToAWE	М		9.2.1.60		-	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
RL Information		1 <maxno ofRLs></maxno 			EACH	notify
>RL ID	М		9.2.1.53		_	
>C-ID	М		9.2.1.9		-	
>First RLS Indicator	М		9.2.2.16A		-	
>Frame Offset	М		9.2.1.31		_	
>Chip Offset	М		9.2.2.2		_	
>Propagation Delay	0		9.2.2.35		-	
>Diversity Control Field	C- NotFirstRL		9.2.1.25		_	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		_	
>Initial DL Transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH or on F-DPCH	_	
>Maximum DL Power	М		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	-	
>Minimum DL Power	М		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	-	
>SSDT Cell Identity	0		9.2.2.44		_	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		_	
>SSDT Cell Identity For EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>Qth Parameter	0		9.2.2.36A		YES	ignore
>Primary CPICH Usage For Channel Estimation	0		9.2.2.33A		YES	ignore
>Secondary CPICH Information	0		Common Physical Channel ID 9.2.1.13		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
Transmission Gap Pattern Sequence Information	0		9.2.2.53A		YES	reject
Active Pattern Sequence Information	0		9.2.2.A		YES	reject
DSCH Common Information	0		DSCH FDD Common Information 9.2.2.13D		YES	ignore

DL Power Balancing Information	0		9.2.2.12B		YES	ignore
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH-RNTI	C- InfoHSDS CH		9.2.1.31J		YES	reject
HS-PDSCH RL ID	C- InfoHSDS CH		RL ID 9.2.1.53		YES	reject
E-DPCH Information		01			YES	reject
>Min UL Channelisation Code Length For E-DCH FDD	М		9.2.2.22a		-	
>Max Number Of UL E- DPDCHs	C- CodeLenE DCH		9.2.2.20B		_	
>Puncture Limit	М		9.2.1.50		-	
>E-TFCS	M		9.2.2.13Dh		_	
>E-TTI	М		9.2.2.13Di		_	
E-DCH FDD Information	C- EDPCHInf o		9.2.2.13Da		YES	reject
Serving E-DCH RL	C- EDPCHInf o		9.2.1.53Ha		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset Information		1			-	
>>PO2	М		Power Offset 9.2.2.29	Power offset for the TPC bits	-	
>FDD TPC DL Step Size	M		9.2.2.16		_	
>Limited Power Increase	M		9.2.2.18A		_	
>Inner Loop DL PC Status	M		9.2.2.18B		-	
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.18K		YES	ignore

Condition	Explanation
CodeLen	The IE shall be present if Min UL Channelisation Code Length IE equals
	to 4.
NotFirstRL	The IE shall be present if the RL is not the first one in the RL Information
	IE.
DSCH	The IE shall be present if the DSCH Information IE is present.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to any of
	the values from 12 to 16.
Diversity mode	The IE shall be present if Diversity Mode IE in UL DPCH Information IE
	is not set to "none'.
EDSCHPC	The IE shall be present if Enhanced DSCH PC IE is present in the
	DSCH Common Information IE.
InfoHSDSCH	The IE shall be present if HS-DSCH Information IE is present.
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.
CodeLenEDCH	The IE shall be present if Min UL Channelisation Code Length For E-
	DCH FDD IE equals 2.

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	reject
UL CCTrCH Information		0 <maxno CCTrCH></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	М		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		_	
>Puncture Limit	М		9.2.1.50		_	
>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16	•	_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>UL Timeslot Information	М		9.2.3.26C		_	
>UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>UL Timeslot Information LCR	M		9.2.3.26E		_	
>UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>TDD TPC UL Step Size	0		9.2.3.21a	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
DL CCTrCH Information		0 <maxno CCTrCH></maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	M		9.2.3.22		_	
>Puncture Limit	M		9.2.1.50		_	
>TDD TPC DL Step Size	M		9.2.3.21		_	
>TPC CCTrCH List		0 <maxno CCTrCH></maxno 		List of uplink CCTrCH which provide TPC	_	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.3		_	
>DL DPCH information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16	,	_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	

>>DL Timeslot	l M		9.2.3.4E		_	
Information			0.2.0.12			
>DL DPCH information		01		Applicable to	YES	notify
LCR				1.28Mcps TDD only		,
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15			
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot	M		9.2.3.40		_	
Information LCR						
>>TSTD Indicator	M		9.2.1.64			
>CCTrCH Initial DL	0		DL Power 9.2.1.21		YES	ignore
Transmission Power					VEO	
>CCTrCH Maximum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>CCTrCH Minimum DL	0		DL Power		YES	ignore
Transmission Power			9.2.1.21			19.757
DCH Information	0		DCH TDD		YES	reject
			Information			
DSCH Information	0		9.2.3.4C DSCH TDD		YES	reject
			Information		120	10,600
			9.2.3.5A			
USCH Information	0		9.2.3.28		YES	reject
RL Information		1			YES	reject
>RL ID	M		9.2.1.53		_	
>C-ID	M		9.2.1.9			
>Frame Offset	M		9.2.1.31		_	
>Special Burst Scheduling	M		9.2.3.18A		_	
>Initial DL Transmission Power	М		DL Power 9.2.1.21		_	
>Maximum DL Power	М		DL Power 9.2.1.21		-	
>Minimum DL Power	М		DL Power 9.2.1.21		_	
>DL Time Slot ISCP Info	0		9.2.3.4F	Applicable to 3.84Mcps TDD only	-	
>DL Time Slot ISCP Info LCR	0		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>Uplink Synchronisation Step Size	М		9.2.3.26H			
>>Uplink Synchronisation Frequency	М		9.2.3.26G		-	
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	C- InfoHSDS CH		9.2.1.31J		YES	reject
HS-PDSCH RL ID	C- InfoHSDS CH		RL ID 9.2.1.53		YES	reject

PDSCH-RL-ID	0	RL ID	YES	ignore
		9.2.1.53		

Range Bound	Explanation
maxnoCCTrCH	Number of CCTrCHs for one UE

Condition	Explanation
InfoHSDSCH	The IE shall be present if HS-DSCH Information IE is present.

9.1.37 RADIO LINK SETUP RESPONSE

9.1.37.1 FDD message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		-	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		1 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		ı	
>RL Set ID	М		9.2.2.39		_	
>Received Total Wide Band Power	М		9.2.2.39A		1	
>CHOICE Diversity Indication	M				1	
>>Combining					-	
>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	ı	
>>Non Combining or First RL					_	
>>>DCH Information Response	М		9.2.1.20C		-	
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>SSDT Support Indicator	М		9.2.2.46		_	
>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
TFCI2 Bearer Information Response	0		9.2.2.49A		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

9.1.37.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info	M		9.2.3.26D		-	
>UL PhysCH SF Variation	M		9.2.3.26B		-	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info LCR	M		9.2.3.26F		_	
>UL PhysCH SF Variation	M		9.2.3.26B		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.5G		YES	ignore

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All NBCC' shall not be used	YES	ignore
Communication Control Port ID	0		9.2.1.15		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.6		_	
>RL Specific					-	
>>Unsuccessful RL Information Response		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
>>Successful RL Information Response		0 <maxno ofRLs></maxno 		Note: There will never be maxnoofRLs repetitions of this sequence.	EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>RL Set ID	M		9.2.2.39		_	
>>>Received Total Wide Band Power	М		9.2.2.39A		_	
>>>CHOICE Diversity Indication	М				-	
>>>Combining					_	
>>>>RL ID	М		9.2.1.53	Reference RL ID for the combining	-	
>>>Non Combining or First RL					-	
>>>>DCH Information Response	М		9.2.1.20C		-	
>>>DSCH Information Response	0		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	0		9.2.2.49A	There shall be only one TFCI2 bearer per Node B Communication Context.	-	
>>>SSDT Support Indicator	М		9.2.2.46		_	
>>>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>>>E-DCH RL Set ID	0		RL Set ID		YES	ignore

		9.2.2.39		
>>>E-DCH FDD DL Control Channel Information	0	9.2.2.13Dc	YES	ignore
>>>Initial DL DPCH Timing Adjustment	0	DL DPCH Timing Adjustment 9.2.2.10A	YES	ignore
>>HS-DSCH Information Response	0	HS-DSCH FDD Information Response 9.2.2.18E	YES	ignore
>>E-DCH Information Response	0	E-DCH FDD Information Response 9.2.2.13Db	YES	ignore
Criticality Diagnostics	0	9.2.1.17	YES	ignore

Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been
	successfully set up.

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

9.1.38.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
CHOICE Cause Level	М				YES	ignore
>General					_	
>>Cause	М		9.2.1.6		_	
>RL Specific					_	
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	M		9.2.1.6			
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.39 RADIO LINK ADDITION REQUEST

9.1.39.1 FDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	2000		
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	-
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
Compressed Mode Deactivation Flag	0		9.2.2.3A		YES	reject
RL Information		1 <maxno ofRLs-1></maxno 			EACH	notify
>RL ID	M		9.2.1.53		_	
>C-ID	М		9.2.1.9		_	
>Frame Offset	М		9.2.1.31		_	
>Chip Offset	М		9.2.2.2		_	
>Diversity Control Field	М		9.2.1.25		-	
>DL Code Information	М		FDD DL Code Information 9.2.2.14A		-	
>Initial DL Transmission Power	0		DL Power 9.2.1.21	Initial power on DPCH or on F-DPCH	_	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	_	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	-	
>SSDT Cell Identity	0		9.2.2.44		_	
>Transmit Diversity Indicator	0		9.2.2.53		_	
>DL Reference Power	0		DL power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>Qth Parameter	0		9.2.2.36A		YES	ignore
>Primary CPICH Usage For Channel Estimation	0		9.2.2.33A		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.18K		YES	ignore

Range Bound	Explanation			
maxnoofRLs	Maximum number of RLs for one UE			

9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH Information		0 <maxno CCTrCH></maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot	M		9.2.3.26C		_	
Information >UL DPCH Information		01		Applicable to 1.28Mcps TDD	YES	notify
LCR		<u> </u>		only		
>>Repetition Period	M		9.2.3.16		ı	
>>Repetition Length	M		9.2.3.15		ı	
>>TDD DPCH Offset	M		9.2.3.19A		1	
>>UL Timeslot Information LCR	M		9.2.3.26E		1	
>TDD TPC UL Step Size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	reject
DL CCTrCH Information		0 <maxno CCTrCH></maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		1	
>DL DPCH information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>DL Timeslot Information	M		9.2.3.4E		_	
>DL DPCH information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot	M		9.2.3.40		_	
Information LCR						
>CCTrCH Initial DL	0		DL Power		YES	ignore
Transmission Power			9.2.1.21		7.50	
>TDD TPC DL Step Size	0		9.2.3.21		YES	reject
>CCTrCH Maximum DL Transmission Power >CCTrCH Minimum DL	0		DL Power 9.2.1.21		YES	ignore
Transmission Power	U		DL Power 9.2.1.21			ignore
RL Information		1			YES	reject
>RL ID	M		9.2.1.53		_	

>C-ID	М		9.2.1.9		_	
>Frame Offset	M		9.2.1.31		_	
>Diversity Control Field	M		9.2.1.25		_	
>Initial DL Transmission Power	0		DL Power 9.2.1.21		-	
>Maximum DL Power	0		DL Power 9.2.1.21		_	
>Minimum DL Power	0		DL Power 9.2.1.21		_	
>DL Time Slot ISCP Info	0		9.2.3.4F	Applicable to 3.84Mcps TDD only	_	
>DL Time Slot ISCP Info LCR	0		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>Uplink Synchronisation Step Size	M		9.2.3.26H		_	
>>Uplink Synchronisation Frequency	М		9.2.3.26G		_	

Range Bound	Explanation			
maxnoCCTrCH	Number of CCTrCH for one UE			

9.1.40 RADIO LINK ADDITION RESPONSE

9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
RL Information Response		1 <maxno ofRLs-1></maxno 			EACH	ignore
>RL ID	M		9.2.1.53		_	
>RL Set ID	M		9.2.2.39		_	
>Received Total Wide Band Power	M		9.2.2.39A		_	
>CHOICE Diversity Indication	M				_	
>>Combining					_	
>>>RL ID	M		9.2.1.53	Reference RL	_	
>>Non Combining					_	
>>>DCH Information Response	M		9.2.1.20C		_	
>SSDT Support Indicator	M		9.2.2.46		_	
>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
RL Information Response		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
>RL ID	М		9.2.1.53		_	
>UL Time Slot ISCP Info	М		9.2.3.26D		_	
>UL PhysCH SF Variation	М		9.2.3.26B		_	
>DCH Information		01			_	
>>CHOICE Diversity Indication	М				-	
>>>Combining				Indicates whether the old Transport Bearer shall be reused or not	-	
>>>>RL ID	М		9.2.1.53	Reference RL	_	
>>>Non Combining					_	
>>>DCH Information Response	М		9.2.1.20C		_	
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
RL Information Response		01		Mandatory for	YES	ignore
LCR				1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.		3
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info LCR	М		9.2.3.26F		_	
>UL PhysCH SF Variation	М		9.2.3.26B		-	
>DCH Information		01			_	
>>CHOICE Diversity indication	М				_	
>>>Combining				Indicates whether the old Transport Bearer shall be reused or not	-	
>>>>RL ID	М		9.2.1.53	Reference RL	_	
>>>Non Combining					_	
>>>DCH Information Response	M		9.2.1.20C		-	
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore

9.1.41 RADIO LINK ADDITION FAILURE

9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			,
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication	М		9.2.1.18	The reserved	YES	ignore
Context ID				value "All CRNCCC' shall not be used.		
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.6		_	
>RL Specific					_	
>>Unsuccessful RL		1 <maxno< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxno<>			EACH	ignore
Information Response		ofRLs-1>				
>>>RL ID	M		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
>>Successful RL		0 <maxno< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxno<>			EACH	ignore
Information Response		ofRLs-2>				
>>>RL ID	M		9.2.1.53		_	
>>>RL Set ID	М		9.2.2.39		_	
>>> Received Total	M		9.2.2.39A		_	
Wide Band Power						
>>>CHOICE Diversity	M				_	
Indication						
>>>Combining					_	
>>>>RL ID	M		9.2.1.53	Reference RL	_	
>>>Non Combining					_	
>>>>DCH	M		9.2.1.20C		_	
Information						
Response						
>>>SSDT Support	M		9.2.2.46		_	
Indicator						
>>>DL Power Balancing	0		9.2.2.12C		YES	ignore
Activation Indicator						
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>>>E-DCH FDD DL	0		9.2.2.13Dc		YES	ignore
Control Channel						
Information						
>>>Initial DL DPCH	0		DL DPCH		YES	ignore
Timing Adjustment			Timing Adjustment			
			9.2.2.10A			
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation			
maxnoofRLs	Maximum number of RLs for one UE			

9.1.41.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
CHOICE Cause Level	М				YES	ignore
>General					_	-
>>Cause	М		9.2.1.6		_	
>RL Specific					_	
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL DPCH Information		01			YES	reject
>UL Scrambling Code	0		9.2.2.59		-	
>UL SIR Target	0		UL SIR 9.2.1.67A		I	
>Min UL Channelistion Code Length	0		9.2.2.22		-	
>Max Number of UL DPDCHs	C- CodeLen		9.2.2.21		_	
>Puncture Limit	0		9.2.1.50	For UL	_	
>TFCS	0		9.2.1.58		_	
>UL DPCCH Slot Format	0		9.2.2.57		_	
>Diversity Mode	0		9.2.2.9		_	
>SSDT Cell Identity Length	0		9.2.2.45		-	
>S-Field Length	0		9.2.2.40		_	
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58		-	-
>DL DPCH Slot Format	0		9.2.2.10		_	
>TFCI Signalling Mode	0		9.2.2.50		-	
>TFCI Presence	C- SlotFormat		9.2.1.57		1	
>Multiplexing Position	0		9.2.2.23		_	
>PDSCH Code Mapping	0		9.2.2.25		_	
>PDSCH RL ID	0		RL ID 9.2.1.53		_	
>Limited Power Increase	0		9.2.2.18A		1	
>DL DPCH Power Information		01			YES	reject
>>Power Offset Information		1			-	
>>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits	-	
>>>PO3	М		Power Offset 9.2.2.29	Power offset for the pilot bits	-	
>>FDD TPC DL Step Size	М		9.2.2.16		_	
>>Inner Loop DL PC Status	М		9.2.2.18B		_	
DCHs To Modify	0		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4D		YES	reject

DCHs To Delete		0 <maxno ofDCHs></maxno 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
DSCH To Modify		0 <maxno ofDSCHs></maxno 			EACH	reject
>DSCH ID	М		9.2.1.27		_	
>Transport Format Set	0		9.2.1.59	For the DL.	_	
>Allocation/Retention Priority	0		9.2.1.1A		-	
>Frame Handling Priority	0		9.2.1.30		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH To Add	0		DSCH FDD Information 9.2.2.13B		YES	reject
DSCH To Delete		0 <maxno ofDSCHs></maxno 			EACH	reject
>DSCH ID	M		9.2.1.27		_	
TFCI2 Bearer Information		01			YES	reject
>CHOICE <i>TFCI2 Bearer</i> Action	M				_	
>>Add or modify					_	
>>>ToAWS	M		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60		_	
>>>TFCI2 Bearer Request Indicator	0		9.2.1.56C		YES	reject
>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>Delete			NULL		_	
RL Information		0 <maxno ofRLs></maxno 			EACH	reject
>RL ID	M		9.2.1.53		_	
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		_	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	-	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power	_	

				on DPCH or on		
				F-DPCH		
>SSDT Indication	0		9.2.2.47		_	
>SSDT Cell Identity	C- SSDTIndO N		9.2.2.44		-	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		_	
>SSDT Cell Identity For	C-		9.2.2.44A		YES	ignore
EDSCHPC	EDSCHPC					
>DL Reference Power	0		DL Power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>DL DPCH Timing Adjustment	0		9.2.2.10A	Required RL Timing Adjustment	YES	reject
>Qth Parameter	0		9.2.2.36A	, rajueumem	YES	ignore
>Primary CPICH Usage For	0		9.2.2.33A		YES	ignore
Channel Estimation						
>Secondary CPICH	0		9.2.2.43A		YES	ignore
Information Change						
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
Transmission Gap Pattern	0		9.2.2.53A		YES	reject
Sequence Information	0		DSCH FDD		YES	ianoro
DSCH Common Information	0		Common		TES	ignore
			Information			
			9.2.2.13D		\/F0	
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH Information To Modify	0		9.2.1.31H		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.53		YES	reject
E-DPCH Information		01			YES	reject
>Min UL Channelisation Code Length For E-DCH FDD	0		9.2.2.22a		_	
>Max Number Of UL E- DPDCHs	C- CodeLenE DCH		9.2.2.20B		_	
>Puncture Limit	0		9.2.1.50		_	
>E-TFCS	0		9.2.2.13Dh		_	
>E-TTI E-DCH FDD Information	0		9.2.2.13Di E-DCH FDD Information		YES	reject

			9.2.2.13Da			
E-DCH FDD Information To Modify	0		9.2.2.13Df		YES	reject
E-DCH MAC-d Flows To Add	0		E-DCH MAC-d Flows Information 9.2.1.29ab		YES	reject
E-DCH MAC-d Flows To Delete	0		9.2.1.29ac		YES	reject
Serving E-DCH RL	0		9.2.1.53Ha		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset Information		1			-	
>>PO2	М		Power Offset 9.2.2.29	Power offset for the TPC bits	-	
>FDD TPC DL Step Size	M		9.2.2.16		_	
>Limited Power Increase	M		9.2.2.18A			
>Inner Loop DL PC Status	М		9.2.2.18B		_	

Condition	Explanation
SSDTIndON	The IE shall be present if the SSDT Indication IE is set to 'SSDT Active
	in the UE'.
CodeLen	The IE shall be present if the Min UL Channelisation Code Length IE is
	equals to 4.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to any of
	the values from 12 to 16.
Diversity mode	The IE shall be present if the Diversity Mode IE is present in the UL
	DPCH Information IEand is not set to "none'.
EDSCHPC	The IE shall be present if the Enhanced DSCH PC IE is present in the
	DSCH Common Information IE.
HSDSCHRadio Link	The IE shall be present if HS-PDSCH RL ID IE is present.
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.
CodeLenEDCH	The IE shall be present if Min UL Channelisation Code Length For E-
	DCH FDD IE equals 2.

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofDSCHs	Maximum number of DSCHs for a UE
maxnoofRLs	Maximum number of RLs for a UE

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	-
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH To Add		0 <maxno ofCCTrCH s></maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		_	
>Puncture Limit	М		9.2.1.50		_	
>UL DPCH To Add Per RL		0 <maxno ofRLs></maxno 		See note 1 below	_	
>>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot Information	М		9.2.3.26C		_	
>>UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>UL Timeslot Information LCR	M		9.2.3.26E		_	
>>UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD	YES	reject
>>TDD TPC UL Step Size	0		9.2.3.21a	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>RL ID	0		9.2.1.53		YES	ignore
UL CCTrCH To Modify		0 <maxno ofCCTrCH s></maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		-	
>TFCS	0		9.2.1.58		-	
>TFCI Coding	0		9.2.3.22		_	
>Puncture Limit	0		9.2.1.50		_	
>UL DPCH To Modify Per RL		0 <maxno ofRLs></maxno 		See note 1 below	_	
>>UL DPCH To Add		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	

TDD DDOLLOW	М		9.2.3.19A	<u> </u>	_	
>>>TDD DPCH Offset	M		9.2.3.19A 9.2.3.26C		_	
>>>UL Timeslot	IVI		9.2.3.200		_	
Information		0.4			\/50	
>>UL DPCH To Modify		01			YES	reject
>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition Length	0		9.2.3.15		_	
>>>TDD DPCH Offset	0		9.2.3.19A		_	
>>>UL Timeslot		0 <maxno< td=""><td></td><td>Applicable to</td><td>_</td><td></td></maxno<>		Applicable to	_	
Information		ofULts>		3.84Mcps TDD		
			0.000	only		
>>>>Time Slot	M		9.2.3.23		_	
>>>Midamble Shift	0		9.2.3.7		_	
And Burst Type						
>>>TFCI Presence	0		9.2.1.57		_	
>>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDPCHs>				
>>>>DPCH ID	M		9.2.3.5		_	
>>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>>>UL Timeslot		0 <maxno< td=""><td></td><td>Applicable to</td><td>GLOBAL</td><td>reject</td></maxno<>		Applicable to	GLOBAL	reject
Information LCR		ofULtsLCR		1.28Mcps TDD		•
miermanen zen		>		only		
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>>Midamble Shift	0		9.2.3.7A			
LCR						
>>>TFCI Presence	0		9.2.1.57		_	
>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		OfDPCHL				
		CR>				
>>>>DPCH ID	М		9.2.3.5		_	
>>>>TDD	0		9.2.3.19a		_	
Channelisation Code						
LCR						
>>>> TDD UL	0		9.2.3.21C		YES	reject
DPCH Time Slot						
Format LCR						
>>UL DPCH To Delete		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
		ofDPCHs>				
>>>DPCH ID	М		9.2.3.5		_	
>>UL DPCH To Add LCR		01		Applicable to	YES	reject
				1.28Mcps TDD		
	N.4		0.0.0.40	only		
>>>Repetition Period	M		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	М		9.2.3.26E		_	
Information LCR						
>>UL SIR Target	0		UL SIR	Applicable to	YES	reject
			9.2.1.67A	1.28Mcps TDD		
TDD == 0 · · · · · · · · · · · · · · · · ·			0.0.0.04 -	only	VEC	ne:
>>TDD TPC UL Step Size	0		9.2.3.21a	Applicable to	YES	reject
				1.28Mcps TDD only		
>>RL ID	0		9.2.1.53	Jiny	YES	ignore
UL CCTrCH To Delete	-	0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
OL COTTON TO Delete		ofCCTrCH			0200/12	. 0,000
		s>				
>CCTrCH ID	М		9.2.3.3		_	
DL CCTrCH To Add		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
		ofCCTrCH				•
		s>	ĺ			

007.01115	N 4		0000			
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	М		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		-	
>Puncture Limit	М		9.2.1.50		1	
>TPC CCTrCH List		0 <maxno ofCCTrCH s></maxno 		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	М		9.2.3.3		ı	
>DL DPCH To Add Per RL		0 <maxno ofRLs></maxno 		See Note 1 below	ı	
>>DL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		-	
>>>TDD DPCH Offset	М		9.2.3.19A		1	
>>>DL Timeslot	М		9.2.3.4E		_	
Information						
>>DL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		1	
>>>Repetition Length	М		9.2.3.15		1	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot Information LCR	М		9.2.3.40		-	
>>CCTrCH Initial DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>>TDD TPC DL Step Size	0		9.2.3.21		YES	reject

>>CCTrCH Maximum DL	0		DL Power		YES	ignore
Transmission Power	0		9.2.1.21 DL Power		YES	ianoro
>>CCTrCH Minimum DL Transmission Power	U		9.2.1.21		YES	ignore
>>RL ID	0		9.2.1.53		YES	ignore
DL CCTrCH To Modify		0 <maxno ofCCTrCH</maxno 	3.2.1.00		GLOBAL	reject
007.011.15	M	S>	9.2.3.3		_	
>CCTrCH ID	0		9.2.3.3		_	
>TFCS					_	
>TFCI Coding	0		9.2.3.22		_	
>Puncture Limit	0		9.2.1.50		_	
>TPC CCTrCH List		0 <maxno ofCCTrCH s></maxno 		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.3		_	
>DL DPCH To Modify Per RL		0 <maxno ofRLs></maxno 		See Note 1 below	_	
>>DL DPCH To Add		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	M		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	М		9.2.3.4E		_	
Information						
>>DL DPCH To Modify		01			YES	reject
>>>Repetition Period	0		9.2.3.16		_	-,
>>>Repetition Length	0		9.2.3.15		_	
•	0		9.2.3.19A		_	
>>>TDD DPCH Offset >>>DL Timeslot		0 <maxno< td=""><td>J.2.J.15/1</td><td>Applicable to</td><td>_</td><td></td></maxno<>	J.2.J.15/1	Applicable to	_	
Information		ofDLts>		3.84Mcps TDD only	_	
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst Type	0		9.2.3.7		_	
>>>TFCI Presence	0		9.2.1.57		_	
>>>DL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDPCHs>				
>>>>DPCH ID	M		9.2.3.5		_	
>>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>>>DL Timeslot Information LCR		0 <maxno ofDLtsLCR ></maxno 		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>>>Time Slot LCR	M		9.2.3.24A	,	_	
>>>>Midamble Shift LCR	0		9.2.3.7A			
>>>TFCI Presence	0		9.2.1.57		_	
>>>>DL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		ofDPCHsL CR>				
>>>>DPCH ID	M		9.2.3.5		_	
>>>>TDD Channelisation Code LCR	0		9.2.3.19a		_	
>>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.19D		YES	reject

>>>>Maximum DL Power to Modify LCR	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	YES	ignore
>>>Minimum DL Power to Modify LCR	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	YES	ignore
>>DL DPCH To Delete		0 <maxno ofDPCHs></maxno 			GLOBAL	reject
>>>DPCH ID	М		9.2.3.5		_	
>>DL DPCH To Add LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot Information LCR	М		9.2.3.40		_	
>>TDD TPC DL Step Size	0		9.2.3.21		YES	reject
>>Maximum CCTrCH DL Power to Modify	0		DL Power 9.2.1.21		YES	ignore
>>Minimum CCTrCH DL Power to Modify	0		DL Power 9.2.1.21		YES	ignore
>>RL ID	0		9.2.1.53		YES	ignore
DL CCTrCH To Delete		0 <maxno ofCCTrCH s></maxno 	0.2.1.00		GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
DCHs To Modify	0		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.4C		YES	reject
DCHs To Delete		0 <maxno ofDCHs></maxno 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
DSCH To Modify		0 <maxno ofDSCHs></maxno 			GLOBAL	reject
>DSCH ID	М		9.2.1.27		_	
>CCTrCH ID	0		9.2.3.3	DL CCTrCH in which the DSCH is mapped	_	
>Transport Format Set	0		9.2.1.59		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Frame Handling Priority	0		9.2.1.30			
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH To Add	0		DSCH TDD		YES	reject
			Information			

			9.2.3.5A			
DSCH To Delete		0 <maxno ofDSCHs></maxno 			GLOBAL	reject
>DSCH ID	M		9.2.1.27		_	
USCH To Modify		0 <maxno ofUSCHs></maxno 			GLOBAL	reject
>USCH ID	М		9.2.3.27		_	
>Transport Format Set	0		9.2.1.59		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>CCTrCH ID	0		9.2.3.3	UL CCTrCH in which the USCH is mapped	-	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A		YES	ignore
USCH To Add	0		USCH Information 9.2.3.28		YES	reject
USCH To Delete		0 <maxno ofUSCHs></maxno 			GLOBAL	reject
>USCH ID	М		9.2.3.27		_	
RL Information		0 <maxno ofRLs></maxno 		See Note 1 below	YES	reject
>RL ID	М		9.2.1.53		_	
>Maximum Downlink Power	0		DL Power 9.2.1.21		_	
>Minimum Downlink Power	0		DL Power 9.2.1.21		_	
>Initial DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	М		9.2.3.26H		_	
>>Uplink Synchronisation Frequency	М		9.2.3.26G		_	
>DL Time Slot ISCP Info LCR	0		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	ignore
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
	0		9.2.1.31H	1	YES	reject

Modify				
HS-DSCH MAC-d Flows To Add	0	HS-DSCH MAC-d Flows Information 9.2.1.31IA	YES	reject
HS-DSCH MAC-d Flows To Delete	0	9.2.1.31IB	YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink	9.2.1.31J	YES	reject
HS-PDSCH RL ID	0	RL ID 9.2.1.53	YES	reject
PDSCH-RL-ID	0	RL ID 9.2.1.53	YES	ignore

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofRLs are represented by separate ASN.1 structures with different criticalities.

Condition	Explanation
HSDSCHRadio Link	The IE shall be present if HS-PDSCH RL ID IE is present.

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD
maxnoofDPCHsLCR	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD
maxnoofDSCHs	Maximum number of DSCHs for one UE
maxnoofUSCHs	Maximum number of USCHs for one UE
maxnoofDLts	Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD
maxnoofULts	Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD
maxnoofRLs	Maximum number of RLs for one UE

9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
Managara Binasisatas	M		Reference 9.2.1.45		_	
Message Discriminator	M		9.2.1.46		YES	reject
Message Type	M		9.2.1.40		163	reject
Transaction ID	M		9.2.1.02	The reserved	YES	ignore
CRNC Communication Context ID	IVI		9.2.1.10	value "All CRNCCC' shall not be used.	123	ignore
RL Information Response		0 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	0		9.2.2.49A	FDD only. There shall be only one TFCI2 bearer per Node B Communication Context.	-	
>DL Power Balancing Updated Indicator	0		9.2.2.12D		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Target Communication Control Port ID	0		Communica tion Control Port ID 9.2.1.15		YES	ignore
HS-DSCH FDD Information Response	0		9.2.2.18E	FDD only	YES	ignore
HS-DSCH TDD Information Response	0		9.2.3.5G	TDD only	YES	ignore
E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore

Range Bound	Explanation		
maxnoofRLs	Maximum number of RLs for a UE		

9.1.44 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.6		YES	ignore
>RL Specific					_	
>>RLs Causing Reconfiguration Failure		0 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	M		9.2.1.6			
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for a UE

9.1.45 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
CFN	M		9.2.1.7		YES	ignore
Active Pattern Sequence Information	0		9.2.2.A	FDD only	YES	ignore

9.1.46 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore

9.1.47 RADIO LINK RECONFIGURATION REQUEST

9.1.47.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the UL.	_	
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the DL.	_	
>TFCI Signalling Mode	0		9.2.2.50		_	
>Limited Power Increase	0		9.2.2.18A		_	
DCHs To Modify	0		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4D		YES	reject
DCHs To Delete		0 <maxno ofDCHs></maxno 			GLOBAL	reject
>DCH ID	M		9.2.1.20		_	
Radio Link Information		0 <maxno ofRLs></maxno 			EACH	reject
>RL ID	M		9.2.1.53		_	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	-	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	_	
>DL Code Information	C-SF/2		FDD DL Code Information 9.2.2.14A		_	
>DL Reference Power	0		DL Power 9.2.1.21	Power on DPCH or on F- DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
Transmission Gap Pattern Sequence Information	0		9.2.2.53A		YES	reject
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.31HA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows		YES	reject

			Information 9.2.1.31IA		
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB	YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J	YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.53	YES	reject
E-DPCH Information		01		YES	reject
>E-TFCS	0		9.2.2.13Dh	_	
E-DCH FDD Information	0		E-DCH FDD Information 9.2.2.13Da	YES	reject
E-DCH FDD Information To Modify	0		9.2.2.13Df	YES	reject
E-DCH MAC-d Flows To Add	0		E-DCH FDD MAC-d Flows Information 9.2.1.29ab	YES	reject
E-DCH MAC-d Flows To Delete	0		9.2.1.29ac	YES	reject
Serving E-DCH RL	0		9.2.1.53Ha	YES	reject

Range Bound	Explanation			
maxnoofDCHs	Maximum number of DCHs for a UE			
maxnoofRLs	Maximum number of RLs for a UE			
maxnoofMACdFlows	Maximum number of MAC-d Flows			
EDPCHInfo	This IE shall be present if E-DPCH Information IE is present.			

Condition	Explanation
SF/2	The IE shall be present if the Transmission Gap Pattern Sequence
	Information IE is included and the indicated Downlink Compressed
	Mode method for at least one of the included Transmission Gap Pattern
	Sequence is set to "SF/2".
HSDSCHRadio Link	The IE shall be present if HS-PDSCH RL ID IE is present.

9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH To Modify		0 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>Puncture Limit	0		9.2.1.50		_	
>UL SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH To Delete		0 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		-	
DL CCTrCH To Modify		0 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>Puncture Limit	0		9.2.1.50		_	
>DL DPCH To Modify LCR		01		Applicable to 1.28Mcps TDD only	YES	ignore
>>DL Timeslot Information LCR		0 <maxno ofDLtsLCR ></maxno 			-	
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	_	
>>>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	_	
>CCTrCH Maximum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>CCTrCH Minimum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
DL CCTrCH To Delete		0 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
DCHs To Modify	0		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.4C		YES	reject
DCHs To Delete		0 <maxno ofDCHs></maxno 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
RL Information		0 <maxno ofRLs></maxno 		See note 1 below	YES	reject

>RL ID	M		9.2.1.53		_	
>Maximum Downlink Power	0		DL Power 9.2.1.21		-	
>Minimum Downlink Power	0		DL Power 9.2.1.21		_	
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	М		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	М		9.2.3.26G		-	
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.2.18D		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.31HA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.53		YES	reject

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofRLs are represented by separate ASN.1 structures with different criticality.

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofRLs	Maximum number of RLs for one UE
maxnoofMACdFlows	Maximum number of MAC-d Flows

Condition	Explanation
HSDSCHRadio Link	The IE shall be present if HS-PDSCH RL ID IE is present.

9.1.48 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
RL Information Response		0 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DL Power Balancing Updated Indicator	0		9.2.2.12D	FDD only	YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Target Communication Control Port ID	0		Communica tion Control Port ID 9.2.1.15		YES	ignore
HS-DSCH FDD Information Response	0		9.2.2.18E	FDD only	YES	ignore
HS-DSCH TDD Information Response	0		9.2.3.5G	TDD only	YES	ignore
E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for a UE

9.1.49 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
CRNC Communication Context ID	М		9.2.1.18		YES	reject
RL Information		1 <maxno ofRLs></maxno 			EACH	notify
>RL ID	M		9.2.1.53		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE

9.1.50 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.51 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Power Adjustment Type	М		9.2.2.27		YES	ignore
DL Reference Power	C- Common		DL power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
Inner Loop DL PC Status	0		9.2.2.18B		YES	ignore
DL Reference Power Information	C- Individual	1 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>DL Reference Power	М		DL power 9.2.1.21	Power on DPCH or on F-DPCH	-	
Max Adjustment Step	C- CommonO rIndividual		9.2.2.20		YES	ignore
Adjustment Period	C- CommonO rIndividual		9.2.2.B		YES	ignore
Adjustment Ratio	C- CommonO rIndividual		9.2.2.C		YES	ignore

Condition	Explanation
Common	The IE shall be present if the Adjustment Type IE is equal to 'Common'.
Individual	The IE shall be present if the Adjustment Type IE is equal to 'Individual'.
CommonOrIndividual	The IE shall be present if the Adjustment Type IE is equal to 'Common"
	or "Individual'.

Range Bound	Explanation
maxnoofRLs	Maximum number of Radio Links for a UE

9.1.52 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used when the Report characteristics type is set to "On Demand'.	YES	reject
Measurement ID	M		9.2.1.42		YES	reject
CHOICE Dedicated Measurement Object Type	М				YES	reject
>RL					_	
>>RL Information		1 <maxno ofRLs></maxno 			EACH	reject
>>>RL ID	M		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>PUSCH Information		0 <maxno ofPUSCHs ></maxno 		TDD only	GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12			
>>>HS-SICH Information		0 <maxno ofHSSICH s></maxno 		TDD only	GLOBAL	reject
>>>HS-SICH ID	М		9.2.3.5Gb		_	
>RLS				FDD only	_	
>>RL Set Information		1 <maxno ofRLSets></maxno 			-	
>>>RL Set ID	М		9.2.2.39		1	
>ALL RL			NULL		ı	
>ALL RLS			NULL	FDD only		
Dedicated Measurement Type	M		9.2.1.23		YES	reject
Measurement Filter Coefficient	0		9.2.1.41		YES	reject
Report Characteristics	М		9.2.1.51		YES	reject
CFN Reporting Indicator	M		FN Reporting Indicator 9.2.1.29B		YES	reject
CFN	0		9.2.1.7		YES	reject
Number Of Reported Cell Portions	C- BestCellP ortionsMe as		9.2.2.23D	FDD only	YES	reject
Measurement Recovery Behavior	0		9.2.1.43A		YES	ignore

Condition	Explanation
BestCellPortionsMeas	The IE shall be present if the Dedicated Measurement Type IE is set to
	'Best Cell Portions'.

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs a measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on
maxnoofHSSICHs	Maximum number of HSSICHs per RL a measurement can be started
	on

9.1.53 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	-
CRNC Communication Context ID	М		9.2.1.18		YES	ignore
Measurement ID	М		9.2.1.42		YES	ignore
CHOICE Dedicated Measurement Object Type	0			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
>RL or ALL RL				See Note 1	_	
>>RL Information		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	ı	
>>>Dedicated Measurement Value	М		9.2.1.24		ı	
>>>CFN	0		9.2.1.7	Dedicated Measurement Time Reference	-	
>>>PUSCH Information		0 <maxno ofPUSCHs ></maxno 		TDD only	GLOBAL	reject
>>>PUSCH ID	М		9.2.3.12		_	
>>>HS-SICH ID	0		9.2.3.5Gb	TDD only	YES	reject
>RLS or ALL RLS				FDD only See Note 2	ı	
>>RL Set Information		1 <maxno ofrlsets=""></maxno>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		_	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>CFN	0		9.2.1.7	Dedicated Measurement Time Reference	_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Measurement Recovery Support Indicator	О		9.2.1.43C		YES	ignore

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs the measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on

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.

9.1.54 DEDICATED MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18		YES	ignore
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.55 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
Measurement ID	М		9.2.1.42		YES	ignore
CHOICE Dedicated Measurement Object Type	M			Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
>RL or ALL RL				See Note 1	_	
>>RL Information		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>Dedicated Measurement Value Information	M		9.2.1.24A		_	
>>>PUSCH Information		0 <maxno ofPUSCHs ></maxno 		TDD only	GLOBAL	reject
>>>>PUSCH ID	М		9.2.3.12		_	
>>>HS-SICH ID	0		9.2.3.5Gb	TDD only	YES	reject
>RLS or ALL RLS				FDD only See Note 2	_	
>>RL Set Information		1 <maxno ofRLSets></maxno 			EACH	ignore
>>>RL Set ID	М		9.2.2.39		_	
>>>Dedicated Measurement Value Information	М		9.2.1.24A		_	
Measurement Recovery Reporting Indicator	0		9.2.1.43B		YES	ignore

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs the measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on

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.

9.1.56 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall be used if this value was used when initiating the measurement. Otherwise, the reserved value "All NBCC" shall not be used.	YES	ignore
Measurement ID	М		9.2.1.42		YES	ignore

9.1.57 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall be used if the Node B Communication Context ID was set to "All NBCC" when initiating the measurement. Otherwise, the reserved value "All CRNCCC" shall not be used.	YES	ignore
Measurement ID	М		9.2.1.42		YES	ignore
Cause	М		9.2.1.6		YES	ignore

9.1.58 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>RL					_	
>>RL Information		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
>RL Set				FDD only	_	
>>RL Set Information		1 <maxno ofRLSets></maxno 			EACH	ignore
>>>RL Set ID	М		9.2.2.39		_	
>>>Cause	М		9.2.1.6		_	
>CCTrCH				TDD only	_	
>>RL ID	M		9.2.1.53		_	
>>CCTrCH List		1 <maxno ofCCTrCH s></maxno 			EACH	ignore
>>>CCTrCH ID	M		9.2.3.3			
>>>Cause	М		9.2.1.6		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofRLSets	Maximum number of RL Sets for one UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
CHOICE Reporting Object	М			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only	_	
>>Radio Link Information		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>RL Set				FDD only	_	
>>RL Set Information		1 <maxno ofRLSets></maxno 			EACH	ignore
>>>RL Set ID	М		9.2.2.39		_	
>CCTrCH				TDD only	_	
>>RL ID	М		9.2.1.53		_	
>>CCTrCH List		1 <maxno ofCCTrCH s></maxno 			EACH	ignore
>>>CCTrCH ID	М		CCTrCH ID 9.2.3.3		-	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofRLSets	Maximum number of RL Sets for one UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

9.1.60 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Active Pattern Sequence Information	M		9.2.2.A		YES	ignore

9.1.61 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	0		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
Node B Communication Context ID	0		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Cause	0		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST

9.1.62.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
SFN	0		9.2.1.53A		YES	reject
HS-PDSCH And HS-SCCH Total Power	0		Maximum Transmissio n Power 9.2.1.40	Maximum transmission power to be allowed for HS- PDSCH and HS-SCCH codes	YES	reject
HS-PDSCH And HS-SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which HS-PDSCH and HS-SCCH is transmitted. 0= Primary scrambling code of the cell 115 = Secondary scrambling code	YES	reject
HS-PDSCH FDD Code Information	0		9.2.2.18F		YES	reject
HS-SCCH FDD Code Information	0		9.2.2.18G		YES	reject

E-AGCH And E-RGCH/E- HICH FDD Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which E-AGCH, E- RGCH and E- HICH are transmitted. 0= Primary scrambling code of the cell 115 = Secondary scrambling code	YES	reject
E-AGCH Code FDD Information	0		9.2.2.13lb		YES	reject
E-RGCH/E-HICH Code FDD Information	0		9.2.2.13la		YES	reject
HSDPA Cell Portion Information		0 <maxno ofCellPorti ons></maxno 			GLOBAL	reject
>Cell Portion ID	M		9.2.2.1Ca		_	
>HS-PDSCH And HS- SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which HS-PDSCH and HS-SCCH is transmitted over cell portion.	_	
>HS-PDSCH FDD Code Information	0		9.2.2.18F		-	
>HS-SCCH FDD Code Information	0		9.2.2.18G		_	

Range Bound	Explanation			
MaxNoofCellPortions	Maximum number of Cell Portions in a cell			

9.1.62.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
SFN	0		9.2.1.53A		YES	reject
PDSCH Sets To Add		0 <maxno ofPDSCH Sets></maxno 			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		_	
>PDSCH To Add Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD Physical Channel Offset	М		9.2.3.20		_	

DI Times let	1	1 <maxno< th=""><th>1</th><th></th><th></th><th></th></maxno<>	1			
>>DL Timeslot Information		ofDLts>			_	
	M	0.2.207	9.2.3.23		_	
>>>Time Slot >>>Midamble Shift	M		9.2.3.7			
And Burst Type	141		0.2.0.7			
>>>TFCI Presence	M		9.2.1.57		_	
>>> Treat Presence	141	1 <maxno< td=""><td>J.Z.1.07</td><td></td><td>_</td><td></td></maxno<>	J.Z.1.07		_	
Information		ofPDSCHs				
>>>>PDSCH ID	М		9.2.3.10		_	
>>>>TDD Channelisation Code	М		9.2.3.19		_	
>PDSCH To Add Information LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical	М		9.2.3.20		_	
Channel Offset						
>>DL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		ofDLtsLCR >				
>>>Time Slot LCR	М	1	9.2.3.24A		_	
>>>Midamble Shift	М		9.2.3.7A		_	
LCR						
>>>TFCI Presence	М		9.2.1.57		_	
>>>DL Code		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		ofPDSCHs >				
>>>>PDSCH ID	М		9.2.3.10		_	
>>>TDD	М		9.2.3.19a		_	
Channelisation Code LCR						
>>TSTD Indicator	0		9.2.1.64		YES	reject
PDSCH Sets To Modify		0 <maxno of PDSCHSe ts></maxno 			GLOBAL	reject
>PDSCH Set ID	М		9.2.3.11		-	
>CHOICE HCR or LCR	М			See note 1 below	-	
>>3.84Mcps TDD					_	
>>>PDSCH To Modify Information		1			YES	reject
>>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition	0		9.2.3.15		-	
Length >>>>TDD Physical	0		9.2.3.20		_	
Channel Offset			0.2.0.20			
>>>DL Timeslot		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDLts>				
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble	0		9.2.3.7		_	
Shift And Burst Type						
>>>>TFCI	0	1	9.2.1.57		_	
Presence	_					

	T		ī	T		
>>>>DL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofPDSCHs				
		>				
>>>>PDSCH	M		9.2.3.10		_	
ID						
>>>>TDD	М		9.2.3.19		_	
	'*'		0.2.0.10			
Channelisation						
Code						
>>1.28Mcps TDD					_	
>>>PDSCH To Modify		1			YES	reject
Information LCR						.,
information LCR						
B	0		9.2.3.16			
>>>Repetition			9.2.3.10		_	
Period						
>>>Repetition	0		9.2.3.15		_	
Length						
Longin						
>>>>TDD Physical	0		9.2.3.20		_	
			0.2.0.20			
Channel Offset						
>>>DL Timeslot		0 <maxno< td=""><td></td><td></td><td>_ </td><td></td></maxno<>			_	
Information LCR		ofDLtsLCR				
		>				
>>>>Time Slot	М		9.2.3.24A		_	
LCR						
			0.0074			
>>>>Midamble	0		9.2.3.7A		_	
Shift LCR						
>>>>TFCI	0		9.2.1.57		_	
Presence						
Fresence						
>>>>DL Code		0 <maxno< td=""><td></td><td></td><td></td><td></td></maxno<>				
		ofPDSCHs			_	
Information LCR						
		>				
>>>>PDSCH	M		9.2.3.10		_	
ID						
>>>>TDD	М		9.2.3.19a		_	
	'''		0.2.0.104			
Channelisation						
Code LCR						
		ļ				
PDSCH Sets To Delete		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
		of				
		PDSCHSe				
		ts>				
>PDSCH Set ID	М		9.2.3.11		_	
PUSCH Sets To Add		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
FUSCH SetS TO Add		of			GLODAL	reject
		PUSCHSe				
	1 1 1	ts>	0.0.0.40			
>PUSCH Set ID	М		9.2.3.13		_	
>PUSCH To Add		01	_	Mandatory for	YES	reject
Information				3.84Mcps TDD.		
				Not Applicable		
				to 1.28Mcps		
				TDD.		
> Donatition Deviced	М		9.2.3.16		_	
>>Repetition Period		1				
>>Repetition Length	М	ļ	9.2.3.15		_	
>>TDD Physical	M	_	9.2.3.20		_	
Channel Offset						
Chamio Onoct	L	L	l	I.		

	1	1 4	I	1	I I	
>>UL Timeslot		1 <maxno ofULts></maxno 			_	
Information		OIOLIS>	0.0.00			
>>>Time Slot	M		9.2.3.23		_	
>>>Midamble Shift And Burst Type	M		9.2.3.7		_	
>>>TFCI Presence	M		9.2.1.57		_	
>>>UL Code Information		1 <maxno ofPUSCHs ></maxno 			_	
>>>PUSCH ID	M		9.2.3.12		_	
>>>>TDD Channelisation Code	M		9.2.3.19		_	
>PUSCH To Add Information LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>>Repetition Period	М		9.2.3.16		-	
>>Repetition Length	М		9.2.3.15		-	
>>TDD Physical Channel Offset	М		9.2.3.20		-	
>>UL Timeslot Information LCR		1 <maxno ofULtsLCR ></maxno 			-	
>>>Time Slot LCR	М		9.2.3.24A		-	
>>>Midamble Shift LCR	М		9.2.3.7A		-	
>>>TFCI Presence	М		9.2.1.57		_	
>>>UL Code Information LCR		1 <maxno ofPUSCHs LCR></maxno 			-	
>>>PUSCH ID	М		9.2.3.12		-	
>>>>TDD Channelisation Code LCR	М		9.2.3.19a		-	
PUSCH Sets To Modify		0 <maxno of PUSCHSe ts></maxno 			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		_	
>CHOICE HCR or LCR	М			See note 1 below	-	
>>3.84Mcps TDD						
>>>PUSCH To Modify		1			YES	reject
Information						
>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition Length	0		9.2.3.15		-	
>>>TDD Physical Channel Offset	0		9.2.3.20		-	
>>>>UL Timeslot Information		0 <maxno ofULts></maxno 			_	

>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble	0		9.2.3.7		_	
Shift And Burst						
Туре						
>>>>TFCI	0		9.2.1.57		_	
Presence						
>>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofPUSCHs				
>>>>PUSCH	М	>	9.2.3.12		_	
ID			0.2.0			
>>>>TDD	М		9.2.3.19		_	
Channelisation						
Code						
>>1.28Mcps TDD					_	
>>>PUSCH To Modify		1			YES	reject
Information LCR						
>>>Repetition	0		9.2.3.16		_	
Period						
			0.0.0.45			
>>>Repetition	0		9.2.3.15		_	
Length						
>>>>TDD Physical	0		9.2.3.20		_	
Channel Offset						
>>>UL Timeslot		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		ofULtsLCR >				
>>>>Time Slot	М		9.2.3.24A		_	
LCR						
>>>>Midamble	0		9.2.3.7A		_	
Shift LCR						
>>>>TFCI	0		9.2.1.57		_	
Presence			0.2.1.07			
resence						
>>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		ofPUSCHs				
	N/A	LCR>	0.2.2.40			
>>>>PUSCH	M		9.2.3.12		_	
ID						
>>>>TDD	М		9.2.3.19a		_	
Channelisation						
Code LCR						
		0			OL OD AL	
PUSCH Sets To Delete		0 <maxno ofPUSCH</maxno 			GLOBAL	reject
		Sets>				
>PUSCH Set ID	М		9.2.3.13		-	
HS-PDSCH TDD		01			GLOBAL	reject
Information						
>DL Timeslot and Code		0 <maxno< td=""><td></td><td>Mandatory for</td><td></td><td></td></maxno<>		Mandatory for		
Information		ofDLts>		3.84Mcps TDD. Not Applicable		
				to 1.28Mcps		
				TDD.		
>>Time Slot	М		9.2.3.23		_	

>>Midamble Shift And	M		9.2.3.7		_	
Burst Type	"		0.2.0.7			
>>Codes		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
		ofHSPDS CHs>				
>>>TDD	M		9.2.3.19		_	
Channelisation Code						
>>HS-PDSCH and HS- SCCH Total Power	0		Maximum Transmissio n Power 9.2.1.40	Maximum transmission power to be allowed for HS- PDSCH and HS-SCCH codes in the timeslot	YES	reject
>DL Timeslot and Code Information LCR		0 <maxno ofDLtsLCR ></maxno 		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	-	
>>Time Slot LCR	М		9.2.3.24a		_	
>>Midamble Shift LCR	М		9.2.3.7A		_	
>>Codes LCR		1 <maxno ofHSPDS CHs></maxno 			-	
>>>TDD	М		9.2.3.19		_	
Channelisation Code						
>>HS-PDSCH and HS- SCCH Total Power	0		Maximum Transmissio n Power 9.2.1.40	Maximum transmission power to be allowed for HS- PDSCH and HS-SCCH codes in the timeslot	YES	reject
Add to HS-SCCH Resource Pool		01			GLOBAL	reject
>HS-SCCH Information		0 <maxno ofHSSCC Hs></maxno 		Applicable to 3.84Mcps TDD only	-	
>>HS-SCCH ID	М		9.2.3.5Ga		_	
>>Time Slot	М		9.2.3.23		_	
>>Midamble Shift And Burst Type	М		9.2.3.7		_	
>>TDD Channelisation Code	М		9.2.3.19		_	
>>Maximum HS-SCCH	M		DL Power 9.2.1.21			
Power >>HS-SICH Information		1			_	
>>>HS-SICH INIORMATION	M	 	9.2.3.5Gb		_	
>>>Time Slot	M	 	9.2.3.23		_	
>>>Midamble Shift And Burst Type	M		9.2.3.7		_	
>>>TDD Channelisation Code	М		9.2.3.19		-	
>HS-SCCH Information		0 <maxno< td=""><td></td><td>Applicable to</td><td>GLOBAL</td><td>reject</td></maxno<>		Applicable to	GLOBAL	reject
LCR		ofHSSCC Hs>		1.28Mcps TDD only		-,
>>HS-SCCH ID	М		9.2.3.5Ga	•	_	
>>Time Slot LCR	М		9.2.3.24a		_	
>>Midamble Shift LCR	М		9.2.3.7A		_	

					,	
>>First TDD	M		TDD		_	
Channelisation Code			Channelisat			
			ion Code			
0 1700	M		9.2.3.19 TDD			
>>Second TDD	IVI		Channelisat		_	
Channelisation Code			ion Code			
			9.2.3.19			
>>Maximum HS-SCCH	М		DL Power		_	
Power			9.2.1.21			
>>HS-SICH Information		1			_	
LCR						
>>>HS-SICH ID	М		9.2.3.5Gb		_	
>>>Time Slot LCR	M		9.2.3.24a		_	
>>>Midamble Shift	M		9.2.3.7A		_	
LCR	141		0.2.0.77			
	M		9.2.3.19			
>>>TDD	IVI		9.2.3.19		_	
Channelisation Code		01			GLOBAL	reject
Modify HS-SCCH		0 1			GLOBAL	reject
Resource Pool		0		A 1: 1- 1 - 4-		
>HS-SCCH Information		0 <maxno ofHSSCC</maxno 		Applicable to 3.84Mcps TDD	_	
		Hs>		only		
>>HS-SCCH ID	М	1107	9.2.3.5Ga	Of Hy	_	
>>Time Slot	0		9.2.3.23		_	
	0		9.2.3.7		_	
>>Midamble Shift And			9.2.3.7		_	
Burst Type	0		9.2.3.19			
>>TDD Channelisation	0		9.2.3.19		_	
Code			DI Davisa			
>>Maximum HS-SCCH	0		DL Power 9.2.1.21		_	
Power			9.2.1.21			
>>HS-SICH Information		01			_	
>>>HS-SICH ID	M		9.2.3.5Gb		_	
>>>Time Slot	0		9.2.3.23		_	
>>>Midamble Shift	0		9.2.3.7		_	
And Burst Type						
>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>HS-SCCH Information		0 <maxno< td=""><td></td><td>Applicable to</td><td>GLOBAL</td><td>reject</td></maxno<>		Applicable to	GLOBAL	reject
LCR		ofHSSCC		1.28Mcps TDD		
		Hs>	00050	only		
>>HS-SCCH ID	M		9.2.3.5Ga		_	
>>Time Slot LCR	0		9.2.3.24a		_	
>>Midamble Shift LCR	0		9.2.3.7A		_	
>>First TDD	0		TDD		_	
Channelisation Code			Channelisat ion Code			
			9.2.3.19			
>>Second TDD	0		TDD			
Channelisation Code	-		Channelisat			
Chamensauon Code			ion Code			
	_		9.2.3.19			
>>Maximum HS-SCCH	0		DL Power		_	
Power			9.2.1.21			
>>HS-SICH Information		01				
LCR						
>>>HS-SICH ID	М		9.2.3.5Gb		_	
>>>Time Slot LCR	0		9.2.3.24a		_	
>>Midamble Shift LCR	0		9.2.3.7A		_	
>>>TDD	0		9.2.3.19		_	
Channelisation Code						
	•		•		•	

Delete from HS-SCCH Resource Pool		0 <maxno of HSSCCHs ></maxno 		GLOBAL	reject
>HS-SCCH ID	М		9.2.3.5Ga	_	
Configuration Generation ID	0		9.2.1.16	YES	reject

Note 1: This information element is a simplified representation of the ASN.1. The choice is in reality performed through the use of ProtocolIE-Single-Container within the ASN.1.

Range Bound	Explanation
maxnoofPDSCHSets	Maximum number of PDSCH Sets in a cell.
maxnoofPDSCHs	Maximum number of PDSCH in a cell.
maxnoofPUSCHSets	Maximum number of PUSCH Sets in a cell.
maxnoofPUSCHs	Maximum number of PUSCH in a cell.
maxnoofDLts	Maximum number of Downlink time slots in a cell for 3.84Mcps TDD.
maxnoofDLtsLCR	Maximum number of Downlink time slots in a cell for 1.28Mcps TDD.
maxnoofULts	Maximum number of Uplink time slots in a cell for 3.84Mcps TDD.
maxnoofULtsLCR	Maximum number of Uplink time slots in a cell for 1.28Mcps TDD
maxnoofHSSCCHs	Maximum number of HS-SCCHs in a Cell
maxnoofHSPDSCHs	Maximum number of HS-PDSCHs in one time slot of a Cell

9.1.63 PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.64 PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Manager Dispersion to a	М		9.2.1.45		_	
Message Discriminator	M		9.2.1.46		YES	roject
Message Type					150	reject
Transaction ID	M		9.2.1.62		_	
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	М		9.2.1.6		_	
>Set Specific				TDD Only	_	
>>Unsuccessful DL Shared Channel Set		0 <maxno ofPDSCH Sets></maxno 			EACH	ignore
>>>PDSCH Set ID	M		9.2.3.13		_	
>>>Cause	M		9.2.1.6		_	
>>Unsuccessful UL Shared Channel Set		0 <maxno ofPUSCH Sets></maxno 			EACH	ignore
>>>PUSCH Set ID	М		9.2.3.13		_	
>>>Cause	М		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxnoofPDSCHSets	Maximum number of PDSCH Sets in a cell
maxnoofPUSCHSets	Maximum number of PUSCH Sets in a cell

9.1.65 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	

CHOICE Reset Indicator	М			YES	ignore
>Communication Context					
>>Communication Context Information		1 <maxco mmunicati onContext ></maxco 		EACH	reject
>>>CHOICE Communication Context Type	M			_	
>>>CRNC Communication Context				_	
>>>>CRNC Communication Context ID	M		9.2.1.18	_	
>>>Node B Communication Context				_	
>>>>Node B Communication Context ID	M		9.2.1.48	_	
>Communication Control Port				_	
>>Communication Control Port Information		1 <maxc CPinNode B></maxc 		EACH	reject
>>>Communication Control Port ID	М		9.2.1.15	_	
>Node B			NULL	 _	

Range Bound	Explanation
maxCommunicationContext	Maximum number of Communication Contexts that can exist in the Node B
maxCCPinNodeB	Maximum number of Communication Control Ports that can exist in the Node B

9.1.66 RESET RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.67 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
DL Time Slot ISCP Info	0		9.2.3.4F	Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.4P	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
Primary CCPCH RSCP	0		9.2.3.11A		YES	ignore
Primary CCPCH RSCP Delta	0		9.2.3.11B		YES	ignore

9.1.68 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
CRNC Communication	M		9.2.1.18		YES	ignore
Context ID						-
RL Information		0 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE

9.1.69 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	reject
CHOICE Information Exchange Object Type	M				YES	reject
>Cell					_	
>>C-ID	M		9.2.1.9		_	
Information Type	M		9.2.1.36D		YES	reject
Information Report Characteristics	М		9.2.1.36B		YES	reject

9.1.70 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	•
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE Information Exchange Object Type	0				YES	ignore
>Cell					_	
>>Requested Data Value	M		9.2.1.51A		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.71 INFORMATION EXCHANGE INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.72 INFORMATION REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE Information Exchange Object Type	М				YES	ignore
>Cell					_	
>>Requested Data Value Information	М		9.2.1.51B		_	

9.1.73 INFORMATION EXCHANGE TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
Information Exchange ID	M		9.2.1.36C		YES	ignore

9.1.74 INFORMATION EXCHANGE FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	М		9.2.1.6		YES	ignore

9.1.75 CELL SYNCHRONISATION INITIATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	-
C-ID	М		9.2.1.9		YES	reject
Cell Sync Burst Repetition Period	M		9.2.3.4J		YES	reject
Time Slot Information		015		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
Cell Sync Burst Transmission Initiation Information		01		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	М		9.2.3.4N		_	
>SFN	М		9.2.1.53A		_	
>Cell Sync Burst Code	М		9.2.3.4G		_	
>Cell Sync Burst Code Shift	М		9.2.3.4H		_	
>Initial DL Transmission Power	М		DL Power 9.2.1.21		_	
Cell Sync Burst Measurement Initiation Information		01		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Measurement ID	M		9.2.3.41		_	
>Cell Sync Burst Code	M		9.2.3.4G		_	
>Cell Sync Burst Code Shift	M		9.2.3.4H		_	
>Synchronisation Report Type	M		9.2.3.18E		_	
>SFN	0		9.2.1.53A		_	
>Synchronisation Report Characteristics	М		9.2.3.18D		_	
SYNC_DL Code Transmission Initiation Information LCR		01		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N		_	
>SFN	M		9.2.1.53A		_	
>UARFCN	М		9.2.1.65		_	
>SYNC_DL Code ID	М		9.2.3.18B		_	
>DwPCH Power	М		9.2.3.5B		_	
SYNC_DL Code Measurement Initiation Information LCR		01		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Measurement ID	М		9.2.3.41	- ,	_	

>SFN	0	9.2.1.53A	_	
>UARFCN	M	9.2.1.65	_	
>SYNC_DL Code ID	М	9.2.3.18B	_	
>Synchronisation Report Type	M	9.2.3.18E	_	
>Synchronisation Report Characteristics	M	9.2.3.18D	_	

9.1.76 CELL SYNCHRONISATION INITIATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.77 CELL SYNCHRONISATION INITIATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.78 CELL SYNCHRONISATION RECONFIGURATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	,
C-ID	М		9.2.1.9		YES	reject
Time Slot	M		9.2.3.23	Applicable to 3.84Mcps TDD only. For 1.28Mcps TDD, the CRNC should set this to 0 and the Node B shall ignore it	YES	reject
Number Of Cycles Per SFN Period	М		9.2.3.7B		YES	reject
Number Of Repetitions Per Cycle Period	M		9.2.3.7C		YES	reject
Cell Sync Burst Transmission Reconfiguration Information		0 <maxno ofCellSync Bursts></maxno 		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	М		9.2.3.4N		_	
>Sync Frame Number To Transmit	М		Sync Frame Number 9.2.3.18C		-	
>Cell Sync Burst Code	0		9.2.3.4G		_	
>Cell Sync Burst Code Shift	0		9.2.3.4H		_	
>DL Transmission Power	0		DL Power 9.2.1.21		_	
Cell Sync Burst Measurement Reconfiguration Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>Cell Sync Burst Measurement Information		1 <maxno ofCellSync Bursts></maxno 			-	
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C		_	
>>Cell Sync Burst Information		1 <maxno ofreceptio nsperSync Frame></maxno 			-	
>>>CSB Measurement ID	M		9.2.3.41		_	
>>>Cell Sync Burst Code	М		9.2.3.4G		_	
>>>Cell Sync Burst Code Shift	М		9.2.3.4H		_	
>Synchronisation Report Type	0		9.2.3.18E		_	
>Synchronisation Report Characteristics	0		9.2.3.18D		_	
Number Of Subcycles Per Cycle Period	0		9.2.3.7D	Applicable to 1.28Mcps TDD only	YES	reject

SYNC_DL Code Transmission Reconfiguration Information LCR		0 <maxno ofSyncFra mesLCR></maxno 		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N		-	
>Sync Frame Number For Transmission	M		Sync Frame Number 9.2.3.18C		_	
>UARFCN	M		9.2.1.65		_	
>SYNC_DL Code ID	0		9.2.3.18B		_	
>DwPCH Power	0		9.2.3.5B		-	
SYNC_DL Code Measurement Reconfiguration Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>SYNC_DL Code Measurement Information LCR		1 <maxno ofSyncDL CodesLCR ></maxno 			-	
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C		ı	
>>Sync_DLCode Information LCR		1 <maxno ofreceptio nsperSync FrameLCR</maxno 				
>>>CSB Measurement	М		9.2.3.41		-	
>>>SYNC_DL Code ID	M		9.2.3.18B		-	
>>>UARFCN	M		9.2.1.65		_	
>>>Propagation Delay Compensation	0		Timing Adjustment Value LCR 9.2.3.22b		-	
>Synchronisation Report Type	0		9.2.3.18E		-	
>Synchronisation Report Characteristics	0		9.2.3.18D		_	

Range Bound	Explanation
maxnoofCellSyncBursts	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps
	TDD
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync
	Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of Sync Frames per subcycle for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for
	1.28Mcps TDD

9.1.79 CELL SYNCHRONISATION RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.80 CELL SYNCHRONISATION RECONFIGURATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.81 CELL SYNCHRONISATION REPORT [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Cell Synchronisation Information		1 <maxce IlinNodeB></maxce 			EACH	ignore
>C-ID	М		9.2.1.9		YES	ignore
>CHOICE Synchronisation Report Type	М				YES	ignore
>>Initial Phase or Steady- State Phase					-	
>>>Cell Sync Burst Measured Information		0 <maxno ofCellSync Bursts></maxno 		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	_	
>>>SFN	М		9.2.1.53A		_	
>>>Cell Sync Burst Information		1 <maxno ofreceptio nsperSync Frame></maxno 			_	
>>>>CHOICE Cell Sync Burst Availability Indicator	M				_	
>>>>Cell Sync Burst Available					_	
>>>>>Cell Sync Burst Timing	M		9.2.3.4L		_	
>>>>>Cell Sync Burst SIR	M		9.2.3.4K		_	
>>>> Cell Sync Burst Not Available			NULL		_	
>>>Accumulated Clock Update	0		Timing Adjustment Value 9.2.3.22a		_	
>>>SYNC_DL Codes Measured Information		0 <maxno ofSyncFra mesLCR></maxno 		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>>SFN	М		9.2.1.53A		_	
>>>>SYNC_DL Code Information		1 <maxno ofreceptio nsperSync FrameLCR ></maxno 			_	

>>>>CHOICE SYNC_DL Code Availability Indicator	M		_	
>>>>SYNC_DL Code Available			_	
>>>>>SYNC_ DL Code ID Timing	M	Cell Sync Burst Timing LCR 9.2.3.4La	_	
>>>>SYNC_ DL Code ID SIR	М	Cell Sync Burst SIR 9.2.3.4K	_	
>>>>SYNC_DL Code Not Available		NULL	_	
>>Late-Entrant Cell		NULL	_	
>>Frequency Acquisition		NULL	_	

Range Bound	Explanation
maxCellinNodeB	Maximum number of Cells in a Node B
maxnoofCellSyncBursts	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps TDD
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of SYNC Frames per measurement reporting period for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD

9.1.82 CELL SYNCHRONISATION TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	0		9.2.3.4N		YES	ignore
CSB Measurement ID	0		9.2.3.41		YES	ignore

9.1.83 CELL SYNCHRONISATION FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	0		9.2.3.4N		YES	ignore
CSB Measurement ID	0		9.2.3.41		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.84 CELL SYNCHRONISATION ADJUSTMENT REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			anu	Description		Criticality
			Reference			

D: : : .	М		9.2.1.45			
Message Discriminator					_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		ı	
Cell Adjustment		1 <maxce< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxce<>			EACH	ignore
Information		llinNodeB>				
>C-ID	M		9.2.1.9		_	
>Frame Adjustment Value	0		9.2.3.5C		_	
>Timing Adjustment Value	0		9.2.3.22a	Applicable to 3.84Mcps TDD only	_	
>DL Transmission Power	0		9.2.1.21	Applicable to 3.84Mcps TDD only	-	
>SFN	0		9.2.1.53A		_	
>DwPCH Power	0		9.2.3.5B	Applicable to 1.28Mcps TDD only	YES	ignore
>Timing Adjustment Value LCR	0		9.2.3.22b	Applicable to 1.28Mcps TDD only	YES	ignore

Range Bound	Explanation
maxCellinNodeB	Maximum number of Cells in a Node B

9.1.85 CELL SYNCHRONISATION ADJUSTMENT RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.86 CELL SYNCHRONISATION ADJUSTMENT FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.6		_	
>Cell Specific					_	
>>Unsuccessful Cell Information Response		1 <maxce IlinNodeB></maxce 			EACH	ignore
>>>C-ID	М		9.2.1.9		_	
>>>Cause	M		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxCellinNodeB	Maximum number of Cells in a Node B

9.1.87 BEARER REARRANGEMENT INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	ignore
DCHs To Re-arrange		0 <maxno ofDCHs></maxno 			GLOBAL	ignore
>DCH ID	М		9.2.1.20		_	
DSCHs To Re-arrange		0 <maxno ofDSCHs></maxno 			GLOBAL	ignore
>DSCH ID	М		9.2.1.27		_	
USCHs To Re-arrange		0 <maxno ofUSCHs></maxno 		TDD only	GLOBAL	ignore
>USCH ID	М		9.2.3.27		_	
TFCI2 Bearer Request Indicator	0		9.2.1.56C	FDD only	YES	ignore
HS-DSCHs MAC-d Flow To Re-arrange		0 <maxno ofMACdFl ows></maxno 			GLOBAL	ignore
>HS-DSCH MAC-d Flow ID	M		9.2.1.311			

Range bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofDSCHs	Maximum number of DSCHs for a UE
maxnoofUSCHs	Maximum number of USCHs for a UE
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows

9.1.88 RADIO LINK ACTIVATION COMMAND

9.1.88.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48		YES	ignore
Delayed Activation Information		1 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>Delayed Activation Update	М		9.2.1.24D		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

9.1.88.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48		YES	ignore
Delayed Activation Information		1 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>Delayed Activation Update	М		9.2.1.24D		-	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

9.1.89 RADIO LINK PARAMETER UPDATE INDICATION

9.1.89.1 FDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
HS-DSCH FDD Update Information	0		9.2.2.18Ea		YES	ignore

9.1.89.2 TDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC' shall not be used.	YES	ignore
HS-DSCH TDD Update Information	0		9.2.3.5GA		YES	ignore

9.1.90 MBMS NOTIFICATION UPDATE COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	ignore
Common Physical Channel ID	М		9.2.1.13		YES	ignore
Modification Period	0		9.2.1.47a		YES	ignore
MICH CFN	M		9.2.1.46a		YES	ignore
NI Information		1 <maxno ofNIs></maxno 			GLOBAL	ignore
>NI	М		9.2.1.47F		_	

Range Bound	Explanation
maxNoofNIs	Maximum number of NIs

9.2 Information Element Functional Definition and Contents

9.2.0 General

Subclause 9.2 presents the NBAP IE definitions in tabular format. The corresponding ASN.1 definition is presented in Subclause 9.3. In case there is a contradiction between the tabular format in Subclause 9.2 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

When specifying information elements which are to be represented by bitstrings, if not otherwise specifically stated in the semantics description of the concerned IE or elsewhere, the following principle applies with regards to the ordering of bits:

- The first bit (leftmost bit) contains the most significant bit (MSB);
- The last bit (rightmost bit) contains the least significant bit (LSB);
- When importing bitstrings from other specifications, the first bit of the bitstring contains the first bit of the concerned information;

9.2.1 Common parameters

9.2.1.1 Add/Delete Indicator

The add/delete indicator shall notify the CRNC whether the associated resource has been added to or removed from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Add/Delete Indicator			ENUMERATED (
			Add,	
			Delete)	

9.2.1.1A Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of Node B internal resources. See Annex A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Level	M		INTEGER (015)	This IE indicates the priority of the request. Usage: Value "0" means "Spare"; It shall be treated as a logical error if received. Values between "1" and "14" are ordered in decreasing order of priority, "1" being the highest and "14" the lowest. Value "15" means "No Priority".
Pre-emption Capability	M		ENUMERATED (shall not trigger pre- emption, may trigger pre- emption)	
Pre-emption Vulnerability	М		ENUMERATED (not pre-emtable, pre-emtable)	

9.2.1.2 Availability Status

The availability status is used to indicate more detailed information of the availability of the resource. In accordance with ref. [3], following values are defined. If the value of this IE is "empty", this implies that none of the status conditions described in ref. [3] are present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Availability Status			ENUMERATED (empty, in test, failed, power off, off line, off duty, dependency, degraded, not installed, log full,)	

9.2.1.3 BCCH Modification Time

Indicates the time after which the new system information shall be applied on BCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BCCH Modification Time			INTEGER (0511)	All SFN values in which MIB may be mapped are allowed. The tabular description is presented in [18].

9.2.1.4 Binding ID

The Binding ID is the identifier of a user data stream.

In case of transport bearer establishment with ALCAP [2][31], this IE contains the identifier that is allocated at the Node B and that is unique for each transport bearer under establishment to/from the Node B.

If the Transport Layer Address contains an IP address [29], this IE contains the UDP port [30] intended to be used for the user plane transport.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Binding ID			OCTET STRING	If the Binding ID includes an
			(14,)	UDP port, the UDP port is
				included in octets 1 and 2. The
				first octet of the UDP port field
				shall be included in the first
				octet of the Binding ID.

9.2.1.4A BLER

Void.

9.2.1.5 Blocking Priority Indicator

The Blocking priority indicator shall indicate the immediacy with which a resource should be blocked from use. The following priority classes shall be supported in the Blocking priority indicator.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Blocking Priority Indicator			ENUMERATED ("High" priority: Block resource
			High,	immediately.
			Normal,	"Normal" priority: Block
			Low,	resource when idle or upon
)	timer expiry.
				"Low" priority: Block resource
				when idle.

9.2.1.5A Burst Mode Parameters

The Burst Mode Parameters IE provides information to be applied for IPDL burst mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Burst Start	М		INTEGER (015)	See [10] and [21]
Burst Length	M		INTEGER (1025)	See [10] and [21]
Burst Frea	М		INTEGER (116)	See [10] and [21]

9.2.1.6 Cause

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Cause Group	М			-
>Radio Network Layer				
>>Radio Network Layer	M		ENUMERATED (
Cause			unknown C-ID,	
			Cell not available,	
			Power level not supported,	
			DL radio resources not available,	
			UL radio resources not	
			available,	
			RL Already	
			Activated/allocated,	
			Node B Resources	
			Unavailable,	
			Measurement not supported	
			for the object,	
			Combining Resources not available,	
			Requested configuration not	
			supported,	
			Synchronization failure,	
			Priority transport channel	
			established,	
			SIB Origination in Node B not	
			Supported,	
			Requested Tx Diversity Mode	
			not supported, Unspecified,	
			BCCH scheduling error,	
			Measurement Temporarily not	
			Available,	
			Invalid CM Setting,	
			Reconfiguration CFN not	
			elapsed, Number of DL codes not	
			supported,	
			S-CPICH not supported,	
			Combining not supported,	
			UL SF not supported,	
			DL SF not supported,	
			Common Transport Channel	
			Type not supported,	
			Dedicated Transport Channel Type not supported,	
			Downlink Shared Channel	
			Type not supported,	
			Uplink Shared Channel Type	
			not supported,	
			CM not supported,	
			Tx diversity no longer	
			supported, Unknown Local Cell ID,	
			Number of UL codes not	
			supported,	
			Information temporarily not	
			available,	
			Information Provision not	
			supported for the object, Cell Synchronisation not	
			supported,	
			Cell Synchronisation	
			Adjustment not supported,	
			DPC Mode Change not	
			Supported,	

>Transport Layer >>Transport Layer	M	IPDL already activated, IPDL not supported, IPDL parameters not available, Frequency Acquisition not supported, Power Balancing status not compatible, Requested type of Bearer Re- arrangement not supported, Signalling Bearer Re- arrangement not supported, Bearer Re-arrangement needed, Delayed Activation not Supported, RL Timing Adjustment not supported, MICH not supported, HARQ Preamble Mode not supported, F-DPCH Not Supported)
>>Transport Layer Cause	M	ENUMERATED (Transport resource unavailable, Unspecified,)
>Protocol		
>>Protocol Cause	M	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	M	ENUMERATED (Control processing overload Hardware failure, O&M intervention, Not enough user plane processing resources, Unspecified,)

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerned capability is missing. On the other hand, "not available" cause values indicate that the concerned capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
BCCH scheduling error	The Node B has detected an illegal BCCH schedule update (see
	subclause 8.2.16.3).
Bearer Re-arrangement needed	The Node B cannot perform the requested Radio Link Reconfiguration
	without bearer re-arrangement.

Cell not Available	The concerned cell or local cell is not available.
Cell Synchronisation not supported	The concernedcell(s) do not support Cell Synchronisation.
Combining not supported	The Node B does not support RL combining for the concernedcells.
Combining Resources Not Available	The value of the received <i>Diversity Control Field IE</i> was set to "Must",
	but the Node B cannot perform the requested combining.
CM not supported	The concerned cell(s) do not support Compressed Mode.
Common Transport Channel Type not	The concerned cell(s) do not support the RACH and/or FACH and/or
supported	CPCH Common Transport Channel Type.
Dedicated Transport Channel Type not	The concerned cell(s) do not support the Dedicated Transport Channel
supported	Type.
Delayed Activation not Supported	The concerned cell(s) do not support delayed activation of RLs.
DL Radio Resources not Available	The Node B 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
supported	Type.
DPC Mode Change not Supported	The concerned cells do not support DPC mode changes.
Frequency Acquisition not supported	The concerned cell(s) do not support Frequency Acquisition.
F-DPCH not supported	The concerned cell(s) do not support the Fractional DPCH
HARQ Preamble Mode not supported	The concerned cell does not support the HARQ Preamble Mode
Information Provision not supported	The requested information provision is not supported for the concerned
for the object	object types.
Information temporarily not available	The requested information can temporarily not be provided.
Invalid CM Settings	The concerned cell(s) consider the requested Compressed Mode settings
invalid civi settings	invalid.
IPDL already activated	The concerned cell(s) have already active IPDL ongoing.
IPDL not supported	The concerned cell(s) do not support the IPDL.
IPDL parameters not available	The concerned cell(s) do not have IPDL parameters defining IPDL to be
If BE parameters not available	applied.
Measurement not Supported For The	At least one of the concerned cell(s) does not support the requested
Object	measurement on the concerned object type.
Measurement Temporarily not	The Node B can temporarily not provide the requested measurement
Available	value.
MICH not supported	The concerned cell does not support MICH.
Node B resources unavailable	The Node B does not have sufficient resources available.
Number of DL codes not supported	The concerned cell(s) do not support the requested number of DL codes.
Number of UL codes not supported	The concerned cell(s) do not support the requested number of UL codes.
Power Level not Supported	A DL power level was requested which the concerned cell(s) do not
	support.
Power Balancing status not compatible	The power balancing status in the SRNC is not compatible with that of
	the Node B.
Priority transport channel established	The CRNC cannot perform the requested blocking since a transport
	channel with a high priority is present.
RL Timing Adjustment not Supported	The concerned cell(s) do not support adjustments of the RL timing.
Reconfiguration CFN not elapsed	The requested action cannot be performed due to that a RADIO LINK
	RECONFIGURATION COMMIT message was received previously,
	but the concerned CFN has not yet elapsed.
Requested Configuration not	The concerned cell(s) do not support the requested configuration i.e.
Supported	power levels, Transport Formats, physical channel parameters.
Requested Type of Bearer Re-	The Node B does not support the requested type of bearer re-
arrangement not supported	arrangement.
Requested Tx Diversity mode not	The concerned cell(s) do not support the requested transmit diversity
supported	mode.
RL already Activated/ allocated	The Node B has already allocated an RL with the requested RL-id for
	this UE context.
S-CPICH not supported	The concerned cell(s) do not support S-CPICH.
SIB Orgination in Node B not	The Node B does not support the origination of the requested SIB for
Supported	the concerned cell.
Signalling Bearer Re-arrangement not	The Node B does not support the Signalling bearer re-arrangement.
1	
supported Synchronisation Failure	Loss of UL Uu synchronisation.

Cell Synchronisation Adjustment not	The concerned cell(s) do not support Cell Synchronisation Adjustment.
supported	
Tx diversity no longer supported	Tx diversity can no longer be supported in the concerned cell.
UL Radio Resources not Available	The Node B does not have sufficient UL radio resources available.
UL SF not supported	The concerned cell(s) do not support the requested minimum UL SF.
UL Shared Channel Type not	The concerned cell(s) do not support the Uplink Shared Channel Type.
supported	
Unknown C-ID	The Node B is not aware of a cell with the provided C-ID.
Unknown Local Cell ID	The Node B is not aware of a local cell with the provided Local Cell ID
Unspecified	Sent when none of the above cause values applies but still the cause is
	Radio Network layer related.

Transport Network Layer cause	Meaning
Transport resource unavailable	The required transport resources are not available.
Unspecified	Sent when none of the above cause values applies but still the cause is
	Transport Network layer related.

Protocol cause	Meaning
Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the
	concerned criticality indicated "reject" (see subclause 10.3).
Abstract Syntax Error (Ignore and	The received message included an abstract syntax error and the
Notify)	concerned criticality indicated "ignore and notify" (see subclause 10.3).
Abstract syntax error (falsely	The received message contained IEs in wrong order or with too many
constructed message)	occurrences (see subclause 10.3).
Message not Compatible with	The received message was not compatible with the receiver state (see
Receiver State	subclause 10.4).
Semantic Error	The received message included a semantic error (see subclause 10.4).
Transfer Syntax Error	The received message included a transfer syntax error (see subclause
	10.2).
Unspecified	Sent when none of the above cause values applies but still the cause is
	protocol related.

Miscellaneous cause	Meaning
Control Processing Overload	Node B control processing overload.
Hardware Failure	Node B hardware failure.
Not enough User Plane Processing	Node B has insufficient user plane processing resources available.
Resources	
O&M Intervention	Operation and Maintenance intervention related to Node B equipment.
Unspecified	Sent when none of the above cause values applies and the cause is not
	related to any of the categories Radio Network Layer, Transport
	Network Layer or Protocol.

9.2.1.7 CFN

Connection Frame Number for the radio connection, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CFN			INTEGER (0255)	

9.2.1.8 CFN Offset

Void.

9.2.1.9 C-ID

The C-ID (Cell identifier) is the identifier of a cell in one RNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-ID			INTEGER (065535)	

9.2.1.9A Common Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the allocated Spreading Factor. [FDD - For the PRACH, the reference spreading factor shall be the minimum possible spreading factor amongst the ones defined by the *RACH Slot Format* IE(s) in the Common Transport Channel Setup or Reconfiguration procedures. For the PCPCH, the reference spreading factor shall be the minimum spreading factor computed from the TFCS as described in [8].]

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Common Transport Channel Setup
- Common Transport Channel Deletion
- [FDD Common Transport Channel Reconfiguration]

For the Common Transport Channel Setup procedure, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Common Transport Channel Deletion one.

[FDD - For the Common Transport Channel Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited if this difference is negative).]

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the "DL cost" shall be applied to the "DL or Global Capacity Credit" and the "UL Cost" shall be applied to the "UL Capacity Credit". If it is modelled as shared resources, both the "DL cost" and the "UL cost" shall be applied to the "DL or Global Capacity Credit".

[FDD - When the Common Transport Channel Setup, Deletion or Reconfiguration procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH, AICH, PCPCH, CD/CA-ICH and AP-AICH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

[FDD - The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by a physical channel, the cost credited to or debited from the Capacity Credit for this physical channel shall be taken as N times the cost given in the consumption law, where N is the number of channelization codes.]

[TDD - When the Common Transport Channel Setup or Deletion procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SF Allocation Law		1 <maxno ofSFs></maxno 		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost	M		INTEGER (065535)	-
>UL cost	M		INTEGER (065535)	

Range Bound	Explanation		
maxnoofSFs	Maximum number of Spreading Factors		

9.2.1.9B Common Measurement Accuracy

The Common Measurement Accuracy IE indicates the accuracy of the common measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Common	M			
Measurement Accuracy				
>T _{UTRAN-GPS} Measurement Accuracy Class				
>>T _{UTRAN-GPS} Measurement Accuracy Class	M		T _{UTRAN-GPS} Accuracy Class 9.2.1.64C	

9.2.1.10 Common Measurement Object Type

Void.

9.2.1.11 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			Reference ENUMERATED (Received Total Wide Band Power, Transmitted Carrier Power, Acknowledged PRACH Preambles, UL Timeslot ISCP, Acknowledged PCPCH Access Preambles, Detected PCPCH Access Preambles, UTRAN GPS Timing of Cell Frames for UE Positioning, SFN-SFN Observed Time Difference, Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission, HS-DSCH Required Power, HS-DSCH Provided Bit Rate, Received Total Wide Band Power for Cell Portion, Transmitted Carrier Power for Cell Portion, Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion, Transmitted carrier power of All codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion, UpPTS Interference, DL Transmission Branch Load, HS-DSCH Required Power for Cell Portion, HS-DSCH Provided Bit Rate for Cell Portion)	"UL Timeslot ISCP" is used by TDD only, "Acknowledged PRACH Preambles", 'Acknowledged PCPCH Access Preambles', 'Detected PCPCH Access Preambles', "DL Transmission Branch Load" are used by FDD only, 'UpPTS interference' is used by 1.28Mcps TDD only

9.2.1.12 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Common Measurement Value	М			·	-	
>Transmitted Carrier					_	
Power						
>>Transmitted	M		INTEGER	According to mapping	_	
Carrier Power			(0100)	in [22] and [23]		
Value						
>Received Total Wide Band Power					_	
>>Received Total	M		INTEGER	According to mapping	_	
Wide Band Power	""		(0621)	in [22] and [23]		
Value			(0.102.)	[==] ss [==]		
>Acknowledged				FDD Only	-	
PRACH Preambles				·		
>>Acknowledged	M		INTEGER	According to mapping	_	
PRACH Preamble			(0240,)	in [22]		
Value				TDD O-1		
>UL Timeslot ISCP >>UL Timeslot	M		INTEGER	TDD Only According to mapping	_	
ISCP	IVI		(0127)	in [23]	_	
>Acknowledged			(0121)	FDD Only	_	
PCPCH Access				1 22 31,		
Preambles						
>>Acknowledged	М		INTEGER	According to mapping	-	
PCPCH Access			(015,)	in [22]		
Preambles						
>Detected PCPCH				FDD Only	_	
Access Preambles	NA.		INTECED	According to manning		
>>Detected PCPCH Access	М		INTEGER (0240,)	According to mapping in [22]	_	
Preambles			(0240,)	[22]		
>Additional Common					_	
Measurement Values						
>>UTRAN GPS					_	
Timing Of Cell						
Frames for UE						
Positioning -			0.04.044		\/=0	
>>>T _{UTRAN-GPS} Measurement	М		9.2.1.64A		YES	ignore
Value Information						
>>SFN-SFN					_	
Observed Time						
Difference						
>>>SFN-SFN	M		9.2.1.53E		YES	ignore
Measurement						
Value Information						
>>Transmitted Carrier Power Of All					_	
Codes Not Used						
For HS-PDSCH Or						
HS-SCCH						
Transmission		<u> </u>	<u> </u>			
>>>Transmitted	М		INTEGER	According to mapping	YES	ignore
Carrier Power Of			(0100)	in [22] and [23]		
All Codes Not						
Used For HS- PDSCH Or HS-	1					
SCCH	1					
Transmission						
Value						
>>HS-DSCH					_	
Required Power						
>>>HS-DSCH	М		9.2.1.31lc		YES	ignore
Required Power	1					
Value Information	1	l				<u> </u>

>>HS-DSCH	I	1	1			
Provided Bit Rate					_	
>>>HS-DSCH	М		9.2.1.31lb		YES	ignore
Provided Bit Rate						
Value Information						
>>Transmitted					_	
Carrier Power For						
Cell Portion		4 .		EDD Oak	OL ODAL	
>>>Transmitted Carrier Power		1< maxNrO		FDD Only	GLOBAL	ignore
For Cell Portion		fCellPor				
Value		tions>				
>>>Cell	М	1101132	9.2.2.1Ca		_	
Portion ID	"		0.2.2.100			
>>>>Transmitte	М		INTEGER	According to mapping	_	
d Carrier Power			(0100)	in [22]		
Value			()	' '		
>>Received Total					_	
Wide Band Power						
For Cell Portion						
>>>Received		1<		FDD Only	GLOBAL	ignore
Total Wide Band		maxNrO				
Power For Cell		fCellPor				
Portion Value	N4	tions>	0.0.0.40			
>>>Cell	M		9.2.2.1Ca		_	
Portion ID >>>Received	M		INTEGER	According to manning		
>>>Received Total Wide	IVI		(0621)	According to mapping in [22]	-	
Band Power			(0621)	111 [22]		
Value						
>>Transmitted					_	
Carrier Power Of All						
Codes Not Used						
For HS-PDSCH Or						
HS-SCCH						
Transmission For						
Cell Portion						
>>>Transmitted		1<		FDD Only	GLOBAL	ignore
Carrier Power Of		maxNrO				
All Codes Not		fCellPor				
Used For HS-		tions>				
PDSCH Or HS-						
SCCH Transmission						
For Cell Portion						
Value						
>>>Cell	M		9.2.2.1Ca		_	
Portion ID			5.2.2.1.00			
>>>>Transmitte	М		INTEGER	According to mapping	_	
d Carrier Power			(0100)	in [22]		
Of All Codes			` ′			
Not Used For						
HS-PDSCH Or						
HS-SCCH						
Transmission						
Value				4 0014		
>>UpPTS				1.28Mcps TDD Only	_	
interference	NA.		INTEGER	A coording to a series	VEC	
>>>UpPTS	М		INTEGER	According to mapping	YES	ignore
interference Value >>DL Transmission	<u> </u>		(0127,)	in [23] FDD Only		
SSULL LEADSONISSION				FDD Only	_	
		•	1		\/50	
Branch Load	M		INITEGED	According to manning	\ \rac{1}{2}	
Branch Load >>>NodeB DL	M		INTEGER	According to mapping	YES	ignore
Branch Load >>>NodeB DL Transmission	M		INTEGER (0101,)	According to mapping in [22]	YES	ignore
Branch Load >>>NodeB DL Transmission Branch Load	M				YES	ignore
Branch Load >>>NodeB DL Transmission Branch Load Values	M				YES	ignore
Branch Load >>>NodeB DL Transmission Branch Load	M				YES -	ignore

For Cell Portion						
>>>HS-DSCH		1 <max< td=""><td></td><td>FDD Only</td><td>GLOBAL</td><td>ignore</td></max<>		FDD Only	GLOBAL	ignore
Required Power		NrOfCel				
For Cell Portion		<i>IPortion</i>				
Information		S>				
>>>Cell	M		9.2.2.1Ca		-	
Portion ID						
>>>HS-DSCH	M		9.2.1.31lc		-	
Required Power						
Value						
Information						
>>HS-DSCH					-	
Provided Bit Rate						
For Cell Portion						
>>>HS-DSCH		1 <max< td=""><td></td><td>FDD Only</td><td>GLOBAL</td><td>ignore</td></max<>		FDD Only	GLOBAL	ignore
Provided Bit Rate		NrOfCel				
For Cell Portion		<i>IPortion</i>				
Information		S>				
>>>Cell	M		9.2.2.1Ca		-	
Portion ID						
>>>HS-DSCH	M		9.2.1.31lb		-	
Provided Bit						
Rate Value						
Information						

Range Bound	Explanation
MaxNrOfCellPortions	Maximum number of Cell Portions in a cell

9.2.1.12A Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement Availability Indicator	М			
>Measurement Available				
>>Common Measurement Value	М		9.2.1.12	
>Measurement Not Available			NULL	

9.2.1.13 Common Physical Channel ID

Common Physical Channel ID is the unique identifier for one common physical channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID			INTEGER (0255)	

9.2.1.13A Common Physical Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	M		9.2.1.13	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.14 Common Transport Channel ID

Common Transport Channel ID is the unique identifier for one common transport channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID			INTEGER (0255)	

9.2.1.14A Common Transport Channel Information Response

The Common Transport Channel Information Response IE provides information for Common Transport Channels that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	M		9.2.1.14	
Binding ID	0		9.2.1.4	
Transport Layer Address	0		9.2.1.63	

9.2.1.14B Common Transport Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	М		9.2.1.14	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

9.2.1.15 Communication Control Port ID

A Communication Control Port corresponds to one signalling bearer between the CRNC and the Node B for the control of Node B Communication Contexts. The Node B may have multiple Communication Control Ports (one per Traffic Termination Point). The Communication Control Port is selected at creation of the Node B Communication Context. The Communication Control Port ID is the identifier of the Communication Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Communication Control Port ID			INTEGER (065535)	

9.2.1.16 Configuration Generation ID

The Configuration Generation ID describes the generation of the configuration of logical resources in a cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Configuration Generation ID			INTEGER (0255)	Value "0" means "No configuration". At possible wraparound of the ID counter in CRNC the value "0" shall not be used.

9.2.1.17 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by a Node B or the CRNC when parts of a received message have not been comprehended or are missing, or if the message contained logical errors. When applicable, it contains information about which IEs that were not comprehended or were missing.

For further details on how to use the Criticality Diagnostics IE, see Annex C.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Procedure ID		01		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error	_	
>Procedure Code	М		INTEGER (0255)	caused the entor	_	
>Ddmode	М		ENUMERATED (TDD, FDD, Common,	"Common" = common to FDD and TDD.	_	
Triggering Message	0		ENUMERATED (initiating message, successful outcome, unsuccessful outcome, outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.	-	
Procedure Criticality	0		ENUMERATED (reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	-	
Transaction ID	0		9.2.1.62		_	
Information Element Criticality Diagnostics		0 <max nooferro rs></max 			-	
>IE Criticality	M		ENUMERATED (reject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "ignore" shall never be used.	-	
>IE ID	М		INTEGER (065535)	The IE ID of the not understood or missing IE	-	
>Repetition Number	0		INTEGER (0255)	The Repetition Number IE gives: • for a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence • for a missing IE: The number of occurrences up to but not including the missing occurrence. Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.		

>Message Structure	0	9.2.1.45A	The Message Structure IE describes the structure where the not understood or missing IE was detected. This IE is included if the not understood IE is not the top level of the message.	YES	ignore
>Type Of Error	M	ENUMERATED (not understood, missing,)		YES	ignore

Range Bound	Explanation
maxnooferrors	Maximum number of IE errors allowed to be reported with a single
	message.

9.2.1.18 CRNC Communication Context ID

The CRNC Communication Context ID is the identifier of the Communication Context in the CRNC.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
CRNC Communication Context			INTEGER (02^20 -	"2^20-1" is a reserved value
ID			1)	indicating all the CRNC
				Communication Contexts that
				can be reached by the
				Communication Control Port
				(All CRNCCC).

9.2.1.18A CTFC

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, "TrCH1" corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. "TrCH2" corresponds to the transport channel having the next lowest transport channel identity, and so on.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
-			Reference	-
CHOICE CTFC Format	M			
>2 bits long				
>>CTFC value	M		INTEGER (03)	
>4 bits long				
>>CTFC value	M		INTEGER (015)	
>6 bits long				
>>CTFC value	M		INTEGER (063)	
>8 bits long				
>>CTFC value	M		INTEGER (0255)	
>12 bits long				
>>CTFC value	M		INTEGER (04095)	
>16 bits long				
>>CTFC value	M		INTEGER (065535)	
>max nb bits long				
>>CTFC value	M		INTEGER	
			(0maxCTFC)	

Range Bound	Explanation
MaxCTFC	Maximum number of the CTFC value is calculated according to the following:
	$\sum_{i=1}^{I} (L_i - 1) P_i$
	with the notation according to ref. [18]

9.2.1.19 DCH Combination Indicator

Void.

9.2.1.20 DCH ID

The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH ID			INTEGER (0255)	

9.2.1.20A Dedicated Channels Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the [FDD - allocated Spreading Factor and the RL/RLS situation] [TDD – allocated Spreading Factor on each DPCH and the assigned timeslot]. [FDD - In Uplink, the reference spreading factor shall be the minimum spreading factor signalled in the Radio Link Setup Request message (*Min UL Channelisation Code Length* IE).]

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion
- [TDD Physical Shared Channel Reconfiguration]

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

[FDD - For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.]

[FDD- When a PDSCH is allocated in the Radio Link Setup procedure, the processing cost associated to this PDSCH, equal to the DL cost RL, shall be debited from the Capacity Credit, in addition to the processing cost of the radio links.

In a similar way, this cost shall be credited to the Capacity Credit, when a PDSCH is deleted and the difference between the new cost and the old cost shall be debited from the Capacity Credit (or credited if this difference is negative) when a PDSCH is reconfigured.]

[FDD - The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by either the radio links or the PDSCH, the cost credited to or debited from the Capacity Credit shall be taken as N times the cost for one code, where N is the number of channelization codes.]

[TDD -The cost for a radio link is a sum of the costs for each DPCH. For the first DPCH assigned to any user in a cell within a timeslot, the initial cost for a DPCH in a timeslot (cost 1) and the cost for a DPCH (cost 2) shall be taken into account. For any DPCH that is not the first DPCH assigned for any user in a cell within a timeslot, only the cost for a DPCH (cost 2) shall be taken into account.]

[TDD – The cost for shared channels is the sum of the costs for each PDSCH and PUSCH assigned to a PUSCH or PDSCH set. For the first PDSCH or PUSCH assigned to any user in a cell within a timeslot, the initial cost for a PDSCH/PUSCH in a timeslot (cost 1) and the cost for a PDSCH/PUSCH (cost 2) shall be taken into account. For any PDSCH/PUSCH that is not the first PDSCH/PUSCH assigned to any user in a cell within a timeslot, only the cost for a PDSCH/PUSCH (cost 2) shall be taken into account.]

[TDD - In the case of Physical Shared Channel Reconfiguration, the sum of the consumption cost of the each PDSCH/PUSCH of the previous configuration shall be credited to the capacity credit, and the sum of the consumption cost of each PDSCH/PUSCH of the new configuration shall be subtracted from the capacity credit.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law		1 <maxno ofSFs></maxno 	Kererence	[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL Cost 1	M		INTEGER (065535)	[FDD – This is the cost of a RLS.] [TDD – This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>DL Cost 2	M		INTEGER (065535)	[FDD – This is the cost of a RL.] [TDD – This is the cost of a DPCH/PDSCH/PUSCH]
>UL Cost 1	M		INTEGER (065535)	FDD – This is the cost of a RLS.] [TDD – This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>UL Cost 2	M		INTEGER (065535)	[FDD – This is the cost of a RL.] [TDD – This is the cost of a DPCH/PDSCH/PUSCH.]

Range Bound	Explanation
maxnoofSFs	Maximum number of Spreading Factors

9.2.1.20B DL Or Global Capacity Credit

The capacity credit indicates to the CRNC the Downlink or global capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Or Global Capacity Credit			INTEGER (065535)	

9.2.1.20C DCH Information Response

The DCH Information Response IE provides information for DCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH Information Response		1 <maxno ofDCHs></maxno 		Only one DCH per set of coordinated DCHs shall be included
>DCH ID	M		9.2.1.20	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCH per UE

9.2.1.21 DL Power

The *DL Power* IE indicates a power level relative to the [FDD - primary CPICH power] [TDD - primary CCPCH power] configured in a cell. If Transmit Diversity is applied to a downlink physical channel, the *DL Power* IE indicates the power offset between the linear sum of the power for this downlink physical channel on all branches and the [FDD - primary CPICH power] [TDD - PCCPCH power] configured in a cell.

[FDD - If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols.] [FDD - If referred to an F-DPCH, it indicates the Reference F-DPCH TX Power.] [FDD - If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

[TDD - If referred to a DPCH or PDSCH, it indicates the power of a spreading factor 16 code, the power for a spreading factor 1 code would be 12 dB higher. If referred to a SCCPCH, the *DL Power* IE specifies the maximum power of the SCCPCH.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power			INTEGER (-350150)	Value = DL Power /10 Unit: dB Range: -35.0 +15.0 dB Step: 0.1dB

9.2.1.22 Dedicated Measurement Object Type

Void.

9.2.1.23 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Dedicated Measurement Type			ENUMERATED ("RSCP" and 'HS-SICH
			SIR,	reception quality ' are used by
			SIR Error,	TDD only.
			Transmitted Code	"Rx Timing Deviation" is used
			Power,	by 3.84Mcps TDD only.
			RSCP,	"Rx Timing Deviation LCR",
			Rx Timing Deviation,	"Angle Of Arrival LCR" are
			Round Trip Time,	used by 1.28Mcps TDD only.
			,	"Round Trip Time", "SIR Error"
			Rx Timing Deviation	are used by FDD only.
			LCR,	'Best Cell Portions' is used by
			Angle Of Arrival	FDD only.
			LCR,	
			HS-SICH reception	
			quality,	
			Best Cell Portions)	

Note: For definitions of the measurement types refer to [4] and [5].

9.2.1.24 Dedicated Measurement Value

The Dedicated Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Dedicated Measurement Value	М				-	,
>SIR Value					_	
>>SIR Value	М		INTEGER (063)	According to mapping in [22] and [23]	_	
>SIR Error Value				FDD only	_	
>>SIR Error Value	M		INTEGER (0125)	According to mapping in [22]	_	
>Transmitted Code Power Value					_	
>>Transmitted Code Power Value	M		INTEGER (0127)	According to mapping in [22] and [23]. Values 0 to 9 and 123 to 127 shall not be used.	_	
>RSCP				TDD only	_	
>>RSCP	М		INTEGER (0127)	According to mapping in [23]	_	
>Rx Timing Deviation Value				Applicable to 3.84Mcps TDD only	_	
>>Rx Timing Deviation	M		INTEGER (08191)	According to mapping in [23]	_	
>Round Trip Time				FDD only	_	
>>Round Trip Time	M		INTEGER (032767)	According to mapping in [22]	_	
>Additional Dedicated Measurement Values					_	
>>Rx Timing Deviation Value LCR				Applicable to 1.28Mcps TDD only	-	
>>>Rx Timing Deviation LCR	M		INTEGER (0511)	According to mapping in [23]	YES	reject
>>Angle Of Arrival Value LCR				Applicable to 1.28Mcps TDD only	-	
>>>AOA Value LCR		1			YES	reject
>>>AOA LCR	M		INTEGER (0719)	According to mapping in [23]	_	
>>>AOA LCR Accuracy Class	M		ENUMERATE D (A, B, C, D, E, F, G, H,)	According to mapping in [23]	_	
>>HS-SICH Reception Quality				Applicable to TDD only	-	
>>>HS-SICH Reception Quality Value		1			YES	reject
>>>Failed HS- SICH	М		INTEGER (020)	According to mapping in [23]	_	
>>>Missed HS-SICH	М		INTEGER (020)	According to mapping in [23]	-	
>>>Total HS- SICH	М		INTEGER (020)	According to mapping in [23]	_	
>>Best Cell Portions				FDD only	YES	reject
>>>Best Cell Portions	M		9.2.2.1Ba		_	

9.2.1.24A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message or not and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement Availability Indicator	М			
>Measurement Available				
>>Dedicated Measurement Value	М		9.2.1.24	
>>CFN	0		9.2.1.7	Dedicated Measurement Time Reference
>Measurement Not Available			NULL	

9.2.1.24B DGPS Corrections

The DGPS Corrections IE contains DGPS information used by the UE Positioning A-GPS method. For further details on the meaning of parameters, see [28].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GPS TOW	M		INTEGER (0604799)	Time in seconds. This field indicates the baseline time for which the corrections are valid.
Status/Health	M		ENUMERATED (UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.1, no data, invalid data)	This field indicates the status of the differential corrections.
Satellite Information		1 <maxno Sat></maxno 		
>SatID	М		INTEGER (063)	Satellite ID
>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	М		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-σ) 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	M		INTEGER (-20472047)	Pseudo Range Correction Unit: m (meters) Step: 0.32 meters
>Range Correction Rate	М		INTEGER (-127127)	Unit: m/s Step: 0.032 m/s

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be provided

9.2.1.24C Delayed Activation

The *Delayed Activation* IE indicates that the activation of the DL power shall be delayed until an indicated CFN or until a separate activation indication is received.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Delayed Activation	M			
>CFN				
>> Activation CFN	M		CFN 9.2.1.7	
>Separate Indication			NULL	

9.2.1.24D Delayed Activation Update

The Delayed Activation Update IE indicates a change of the activation of the DL power for a specific RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Delayed Activation	M			
Update				
>Activate				
>>CHOICE Activation Type	M			
>>>Synchronised				
>>>Activation CFN	M		CFN 9.2.1.7	
>>>Unsynchronised			NULL	
>>Initial DL TX Power	M		DL Power	
			9.2.1.21	
>>First RLS Indicator	0		9.2.2.16A	FDD Only
>>Propagation Delay	0		9.2.2.35	FDD Only
>Deactivate				
>>CHOICE Deactivation	M			
Туре				
>>>Synchronised				
>>>Deactivation CFN	M	•	CFN 9.2.1.7	
>>>Unsynchronised		•	NULL	

9.2.1.24E Discard Timer

The *Discard Timer* IE defines the time to live for a MAC-hs SDU starting from the instant of its arrival into an HSDPA Priority Queue. The Node B shall use this information to discard out-of-data MAC-hs SDUs from the HSDPA Priority Queues.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Discard Timer			ENUMERATED (20,	Unit: ms
			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,)	

9.2.1.25 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Control Field			ENUMERATED (May, Must, Must Not,)	

9.2.1.26 Diversity Indication

Void.

9.2.1.26A DL DPCH Timing Adjustment

Void.

9.2.1.27 DSCH ID

The DSCH ID uniquely identifies a DSCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH ID			INTEGER (0255)	

9.2.1.27A DSCH Information Response

The DSCH Information Response IE provides information for DSCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH Information Response		1 <maxno ofDSCHs></maxno 		
>DSCH ID	M		9.2.1.27	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	

Range Bound	Explanation
maxnoofDSCHs	Maximum number of DSCHs for one UE

9.2.1.28 DSCH Transport Format Set

Void.

9.2.1.29 DSCH Transport Format Combination Set

Void.

9.2.1.29aa E-DCH Capability

This parameter defines the E-DCH capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Capability			ENUMERATED (E-	
			DCH Capable, E-	
			DCH non Capable)	

9.2.1.29ab 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
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows ></maxno 		
>E-DCH MAC-d Flow ID	М		9.2.1.29ad	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>Allocation/Retention Priority	M		9.2.1.1A	
>TNL QoS	0		9.2.1.58A	
>Payload CRC Presence Indicator	М		9.2.1.49	
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.39a	
Data Description Indicator		1 <maxno ofDDIs></maxno 		
>E-DCH DDI Value	М		9.2.1.29af	
>Associated E-DCH MAC-d Flow ID	М		E-DCH MAC-d Flow ID 9.2.1.29ad	The E-DCH MAC-d Flow ID shall be one of the flow IDs defined in the E-DCH MAC-d Flow Specific Information of this IE. Multiple E-DCH DDI Values can be associated with the same E-DCH MAC-d Flow ID.
>MAC-d PDU Size	M		9.2.1.38A	
>Scheduling Priority Indicator	М		9.2.1.53H	
>MAC-es Guaranteed Bit Rate	0		9.2.1.38aa	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows
maxnoofDDIs	Maximum number of Data Description Indicators

9.2.1.29ac E-DCH MAC-d Flows To Delete

The *E-DCH MAC-d Flows To Delete* IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flows To Delete		1 <maxno ofEDCHM ACdFlows</maxno 		
		>		
>E-DCH MAC-d Flow ID	M		9.2.1.29ad	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

9.2.1.29ad E-DCH MAC-d Flow ID

The E-DCH MAC-d Flow ID is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow ID			INTEGER	
			(0maxnoofEDCHM	
			ACdFlows - 1)	

Range Bound	Explanation		
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows		

9.2.1.29ae E-RNTI

The E-RNTI is needed for the UE (or UE group) specific CRC in E-AGCH, see ref. [38].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI			INTEGER (065535)	

9.2.1.29af E-DCH DDI Value

The E-DCH DDI Value is the Data Description Indicator value identifying a unique combination of E-DCH MAC-d Flow ID and MAC-d PDU Size.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH DDI Value			INTEGER (063)	

9.2.1.29A End Of Audit Sequence Indicator

Indicates if the AUDIT RESPONSE message ends an audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
End Of Audit Sequence Indicator			ENUMERATED (End of audit sequence, Not end of audit sequence)	"End of audit sequence" = all audit information has been provided by the Node B. "Not end of audit sequence" = more audit information is available.

9.2.1.29B FN Reporting Indicator

The Frame Number Reporting Indicator indicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FN Reporting Indicator			ENUMERATED (FN Reporting Required, FN Reporting Not Required)	

9.2.1.30 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH/DSCH for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Handling Priority			INTEGER (015)	"0" = lowest priority,
				"15" = highest priority

9.2.1.31 Frame Offset

The Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame Offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and the least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Offset			INTEGER (0255)	Frames

9.2.1.31A IB_OC_ID

The IB OC ID identifies the occurrence of a specific Information Block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB OC ID			INTEGER (116)	

9.2.1.31B GPS Navigation Model & Time Recovery

This IE contains subframes 1 to 3 of the GPS navigation message. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		1 <maxno Sat></maxno 		
>Transmission TOW	М		INTEGER (01048575)	Time of the Week when the message is broadcast.
>SatID	M		INTEGER (063)	Satellite ID of the satellite from which the information is obtained
>TLM Message	M		BIT STRING (14)	
>TIm Revd (C)	M		BIT STRING (2)	
>HO-Word	M		BIT STRING (22)	
>WN	M		BIT STRING (10)	
>C/A or P on L2	M		BIT STRING (2)	
>User Range Accuracy Index	M		BIT STRING (4)	
>SV Health	M		BIT STRING (6)	
>IODC	M		BIT STRING (10)	
>L2 P Data Flag	M		BIT STRING (1)	
>SF 1 Reserved	M		BIT STRING (87)	
>T _{GD}	M		BIT STRING (8)	
>t _{oc}	M		BIT STRING (16)	
>af ₂	M		BIT STRING (8)	
>af ₁	M		BIT STRING (16)	
>af ₀	M		BIT STRING (22)	
>C _{rs}	M		BIT STRING (16)	
>∆n	M		BIT STRING (16)	
>M ₀	M		BIT STRING (32)	
>C _{uc}	M		BIT STRING (16)	
>e	M		BIT STRING (32)	
>C _{us}	M		BIT STRING (16)	
>(A) ^{1/2}	M		BIT STRING (32)	
>t _{oe}	M		BIT STRING (16)	
>Fit Interval Flag	M		BIT STRING (1)	
>AODO	M		BIT STRING (5)	
>C _{ic}	M		BIT STRING (16)	
>OMEGA ₀	M		BIT STRING (32)	
>C _{is}	M		BIT STRING (16)	
>i ₀	M		BIT STRING (32)	
>C _{rc}	M		BIT STRING (16)	
>0	M		BIT STRING (32)	
>OMEGAdot	M		BIT STRING (24)	
>ldot	M		BIT STRING (14)	
>Spare/zero fill	M		BIT STRING (20)	

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31C GPS Ionospheric Model

This IE provides the information regarding the GPS Ionospheric Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
α_0	M		BIT STRING (8)	
α_1	M		BIT STRING (8)	
α_2	M		BIT STRING (8)	
α ₃	M		BIT STRING (8)	
βο	M		BIT STRING (8)	
β ₁	M		BIT STRING (8)	
β_2	M		BIT STRING (8)	
β ₃	M		BIT STRING (8)	

9.2.1.31D GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
A ₁	M		BIT STRING (24)	
A ₀	M		BIT STRING (32)	
t _{ot}	M		BIT STRING (8)	
Δt_{LS}	M		BIT STRING (8)	
WN _t	M		BIT STRING (8)	
WN _{LSF}	M		BIT STRING (8)	
DN	M		BIT STRING (8)	
Δt_{LSF}	M		BIT STRING (8)	

9.2.1.31E GPS Real-Time Integrity

This IE provides the information regarding the status of the GPS constellation. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Bad Satellites	M			
Presence				
>Bad Satellites				
>>Satellite Information		1 <maxno< td=""><td></td><td></td></maxno<>		
		Sat>		
>>>BadSatID	M		INTEGER (063)	Satellite ID
>No Bad Satellites			NULL	

Range Bound	Explanation		
maxNoSat	Maximum number of satellites for which information can be provided		

9.2.1.31F GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
WN _a	М		BIT STRING (8)	
Satellite Information	M	1 <maxno OfSatAlma nac></maxno 		See Note 1.
>DataID	М		INTEGER (03)	
>SatID	М		INTEGER (063)	Satellite ID
>e	М		BIT STRING (16)	
>t _{oa}	М		BIT STRING (8)	
>δi	М		BIT STRING (16)	
>OMEGADOT	M		BIT STRING (16)	
>SV Health	M		BIT STRING (8)	
>A ^{1/2}	M		BIT STRING (24)	
>OMEGA ₀	M		BIT STRING (24)	
>M ₀	M		BIT STRING (24)	
>ω	М		BIT STRING (24)	
>af ₀	М		BIT STRING (11)	
>af₁	М		BIT STRING (11)	
SV Global Health	0		BIT STRING (364)	

Range Bound	Explanation
maxNoOfSatAlmanac	Maximum number of satellite almanacs for which information can be
	provided

Note 1: This information element is a simplified representation of the ASN.1 description. Repetitions 1 through maxNoSat and repetitions maxNoSat+1 through maxNoOfSatAlmanac are represented by separate ASN.1 structures with different criticality.

9.2.1.31G GPS Receiver Geographical Position (GPS RX Pos)

The GPS Receiver Geographical Position is used to identify the geographical coordinates of a GPS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	М		ENUMERATED (North, South)	
Degrees of Latitude	M		INTEGER (02 ²³ -1)	The IE value (N) is derived by this formula: N≤2 ²³ X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	М		INTEGER (-2 ²³ 2 ²³ -1)	The IE value (N) is derived by this formula: N≤2 ²⁴ X /360 < N+1 X being the longitude in degree (-180°+180°)
Direction of Altitude	M		ENUMERATED (Height, Depth)	
Altitude	М		INTEGER (02 ¹⁵ -1)	The relation between the value (N) and the altitude (a) in meters it describes is N≤ a <n+1, except="" for="" n="2<sup">15-1 for which the range is extended to include all greater values of (a).</n+1,>

9.2.1.31Ga HSDPA Capability

This parameter defines the HSDPA capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HSDPA Capability			ENUMERATED (HSDPA Capable,	
			HSDPA non Capable)	

9.2.1.31H HS-DSCH Information To Modify

The *HS-DSCH Information To Modify* IE is used for modification of HS-DSCH information in a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxno ofMACdFl ows></maxno 			-	
>HS-DSCH MAC-d Flow ID	М		9.2.1.311		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
Priority Queue Information		0 <maxno ofPrioQue ues></maxno 			_	
>CHOICE Priority Queue	M				_	
>>Add Priority Queue					_	
>>>Priority Queue ID	M		9.2.1.49C		_	
>>>Associated HS- DSCH MAC-d Flow	М		HS-DSCH MAC-d Flow ID 9.2.1.311	Shall only refer to an HS-DSCH MAC-d flow already existing in the old configuration. Multiple Priority Queues can be associated with the same HS-DSCH MAC-d Flow ID.	-	
>>>Scheduling Priority Indicator	M		9.2.1.53H		_	
>>>T1	М		9.2.1.56a		_	
>>>Discard Timer	0		9.2.1.24E		_	
>>>MAC-hs Window Size	М		9.2.1.38B		_	
>>>MAC-hs Guaranteed Bit Rate	0		9.2.1.38Aa		_	
>>>MAC-d PDU Size Index		1 <maxno ofMACdP DUindexes ></maxno 			_	
>>>SID	М		9.2.1.531			
>>>MAC-d PDU Size	M		9.2.1.38A		_	
>>>RLC Mode	M		9.2.1.52B		_	
>>Modify Priority Queue >>>Priority Queue ID	M		9.2.1.49C	Shall only refer to a Priority Queue already existing in the old configuration.	-	
>>>Scheduling Priority Indicator	0		9.2.1.53H		_	
>>>T1	0		9.2.1.56a		_	

D: 1.T:			0.04.045	T		
>>>Discard Timer	0		9.2.1.24E		_	
>>>MAC-hs Window Size	0		9.2.1.38B		_	
>>>MAC-hs Guaranteed Bit Rate	0		9.2.1.38Aa		-	
>>>MAC-d PDU Size Index		0 <maxno ofMACdP DUindexes ></maxno 			-	
>>>SID	M		9.2.1.531		_	
>>>>MAC-d PDU Size	M		9.2.1.38A		_	
>>Delete Priority Queue					_	
>>>Priority Queue ID	М		9.2.1.49C	Shall only refer to a Priority Queue already existing in the old configuration.	-	
MAC-hs Reordering Buffer Size for RLC-UM	0		9.2.1.38Ab		-	
CQI Feedback Cycle k	0		9.2.2.21B	For FDD only	_	
CQI Repetition Factor	0		9.2.2.4Cb	For FDD only	_	
ACK-NACK Repetition Factor	0		9.2.2.a	For FDD only	_	
CQI Power Offset	0		9.2.2.4Ca	For FDD only	_	
ACK Power Offset	0		9.2.2.b	For FDD only	_	
NACK Power Offset	0		9.2.2.23a	For FDD only	_	
HS-SCCH Power Offset	0		9.2.2.181	For FDD only	_	
Measurement Power Offset	0		9.2.2.21C	For FDD only	-	
HS-SCCH Code Change Grant	0		9.2.1.31L		-	
TDD ACK NACK Power Offset	0		9.2.3.18F	For TDD only	_	
HARQ Preamble Mode	0		9.2.2.18a	For FDD only	YES	reject

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues
maxnoofMACdPDUindexes	Maximum number of different MAC-d PDU SIDs

9.2.1.31HA HS-DSCH Information To Modify Unsynchronised

The *HS-DSCH Information To Modify Unsynchronised* IE is used for modification of HS-DSCH information in a Node B Communication Context with the Unsynchronised Radio Link Reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxno ofMACdFI ows></maxno 			_	
>HS-DSCH MAC-d Flow ID	M		9.2.1.311		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	M		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
Priority Queue Information		0 <maxno ofPrioQue ues></maxno 			_	
>Priority Queue ID	M		9.2.1.49C		_	
>Scheduling Priority Indicator	0		9.2.1.53H		_	
>Discard Timer	0		9.2.1.24E		_	
>MAC-hs Guaranteed Bit Rate	0		9.2.1.38Aa		_	
CQI Power Offset	0		9.2.2.4Ca	For FDD only	_	
ACK Power Offset	0		9.2.2.b	For FDD only	_	
NACK Power Offset	0		9.2.2.23a	For FDD only	_	
HS-SCCH Power Offset	0		9.2.2.181	For FDD only	_	
TDD ACK NACK Power Offset	0		9.2.3.18F	For TDD only	_	
HARQ Preamble Mode	0		9.2.2.18a	For FDD only	YES	reject

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues

9.2.1.31Ha HS-DSCH Initial Capacity Allocation

The *HS-DSCH Initial Capacity Allocation* IE provides flow control information for each scheduling priority class for the HS-DSCH FP over Iub.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Initial Capacity		1 <maxno< td=""><td></td><td></td></maxno<>		
Allocation		ofPrioQue		
		ues>		
>Scheduling Priority Indicator	M		9.2.1.53H	
>Maximum MAC-d PDU Size	M		MAC-d PDU Size	
			9.2.1.38A	
>HS-DSCH Initial Window	M		9.2.1.31Hb	
Size				

Range Bound	Explanation
maxnoofPrioQueues	Maximum number of Priority Queues

9.2.1.31Hb HS-DSCH Initial Window Size

Indicates the initial number of MAC-d PDUs that may be transmitted before new credits are received from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Initial Window Size			INTEGER (1255)	Number of MAC-d PDUs

9.2.1.31I HS-DSCH MAC-d Flow ID

HS-DSCH MAC-d Flow ID is the unique identifier for one MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow ID			INTEGER (07)	

9.2.1.31IA HS-DSCH MAC-d Flows Information

The *HS-DSCH MAC-d Flows Information* IE is used for the establishment of HS-DSCH MAC-d flows for a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow Specific Information		1 <maxno ofMACdFl</maxno 		
		ows>		
>HS-DSCH MAC-d Flow ID	M		9.2.1.311	
>Allocation/Retention Priority	M		9.2.1.1A	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
Priority Queue Information		1 <maxno ofPrioQue ues></maxno 		
>Priority Queue ID	M		9.2.1.49C	
>Associated HS-DSCH MAC-d Flow	М		HS-DSCH MAC-d Flow ID 9.2.1.31I	The HS-DSCH MAC-d Flow ID shall be one of the flow IDs defined in the HS-DSCH MAC-d Flow Specific Information of this IE. Multiple Priority Queues can be associated with the same HS-DSCH MAC-d Flow ID.
>Scheduling Priority Indicator	М		9.2.1.53H	
>T1	M		9.2.1.56a	
>Discard Timer	0			
>MAC-hs Window Size	M		9.2.1.38B	
>MAC-hs Guaranteed Bit Rate	0		9.2.1.38Aa	
>MAC-d PDU Size Index		1 <maxno ofMACdP DUindexes</maxno 		
>>SID	М		9.2.1.531	
>>MAC-d PDU Size	М	_	9.2.1.38A	
>RLC Mode	M		9.2.1.52B	

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues
maxnoofMACdPDUindexes	Maximum number of different MAC-d PDU SIDs

9.2.1.31IB HS-DSCH MAC-d Flows To Delete

The *HS-DSCH MAC-d Flows To Delete* IE is used for the removal of HS-DSCH MAC-d flows from a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flows To Delete		1 <maxno ofMACdFl ows></maxno 		
>HS-DSCH MAC-d Flow ID	M		9.2.1.311	

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows

9.2.1.31la HS-DSCH Physical Layer Category

The HS-DSCH Physical Layer Category IE defines a set of UE radio access capabilities related to HSDPA, as defined in [33].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Physical Layer Category			INTEGER (164,)	

9.2.1.31laa HS-DSCH Provided Bit Rate Value

The HS-DSCH Provided Bit Rate Value IE indicates the HS-DSCH Provided Bit Rate as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Provided Bit Rate			INTEGER	Expressed in bit/s.
Value			(02^24-1,)	

9.2.1.31lb HS-DSCH Provided Bit Rate Value Information

The HS-DSCH Provided Bit Rate Value Information IE reports the HS-DSCH Provided Bit Rate Value IE for each priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Provided Bit Rate Value Information		1 <maxno ofPriorityCl asses></maxno 	Reference	
>Scheduling Priority Indicator	M		9.2.1.53H	
>HS-DSCH Provided Bit Rate Value	М		9.2.1.31laa	

Range Bound	Explanation
maxNoofPriorityClasses	Maximum number of HS-DSCH Scheduling Priorities

9.2.1.31lba HS-DSCH Required Power Value

The *HS-DSCH Required Power Value* IE indicates the minimum necessary power for a given priority class to meet the Guaranteed Bit Rate for all the established HS-DSCH connections belonging to this priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Required Power Value			INTEGER (01000)	Expressed in thousandths of the max transmission power

9.2.1.31Ic HS-DSCH Required Power Value Information

The HS-DSCH Required Power Value Information IE reports the HS-DSCH Required Power Value IE for each priority class. For each priority class, a list of UEs, identified by the CRNC Communication Context IEs, requiring a particularly high amount of power to meet the Guaranteed Bit Rate for their established HS-DSCH connections may be included. Additionally, the HS-DSCH Required Power Per UE Weight IE may be included for each of those UEs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Required Power Value Information		1 <maxno ofPriorityCl asses></maxno 		
>Scheduling Priority Indicator	M		9.2.1.53H	
>HS-DSCH Required Power Value	М		9.2.1.31lba	
>HS-DSCH Required Power Per UE Information		0 <maxno ofContexts onUeList></maxno 		List of UEs with Guaranteed Bit Rate indicating their required power consumption relative to the HS-DSCH Required Power Value.
>>CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC' shall not be used.
>>HS-DSCH Required Power Per UE Weight	0		INTEGER (0100)	Expressed in percentage of the value provided in the HS-DSCH Required Power Value IE

Range Bound	Explanation
maxNoofContextsonUeList	Maximum number of Communication Contexts to include in the list of
	UEs
maxNoofPriorityClasses	Maximum number of HS-DSCH Scheduling Priorities

9.2.1.31J HS-DSCH RNTI

The HS-DSCH RNTI is used for the UE-specific CRC in HS-SCCH and HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH RNTI			INTEGER (065535)	

9.2.1.31K HS-SCCH Code Change Indicator

The HS-SCCH Code Change Indicator indicates whether the HS-SCCH Code change is needed or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS-SCCH Code Change			ENUMERATED (HS-	
Indicator			SCCH Code Change	
			needed)	

9.2.1.31L HS-SCCH Code Change Grant

The HS-SCCH Code Change Grant IE indicates that modification of HS-SCCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Grant			ENUMERATED (Change Granted)	

9.2.1.32 IB_SG_DATA

Segment as defined in ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_DATA			BIT STRING	Contains "SIB data fixed" or "SIB data variable' in segment as encoded in ref. [18]. See Annex D

9.2.1.33 IB_SG_POS

The lowest position of a specific Information Block segment in the SFN cycle (IB_SG_POS < IB_SG_REP).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_POS			INTEGER (04094)	Only even positions are allowed. See ref. [18]

9.2.1.34 IB_SG_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when SFN mod IB_SG_REP = IB_SG_POS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_REP			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the IB segment in frames

9.2.1.35 IB Type

The IB Type identifies a specific system information block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB Type			ENUMERATED (
			MIB,	
			SB1,	
			SB2,	
			SIB1,	
			SIB2,	
			SIB3,	
			SIB4,	
			SIB5,	
			SIB6,	
			SIB7,	
			SIB8,	
			SIB9,	
			SIB10,	
			SIB11,	
			SIB12,	
			SIB13,	
			SIB13.1,	
			SIB13.2,	
			SIB13.3,	
			SIB13.4,	
			SIB14,	
			SIB15,	
			SIB15.1,	
			SIB15.2,	
			SIB15.3,	
			SIB16,	
			, SIB17,	
			SIB15.4,	
			SIB18,	
			SIB15.5)	

9.2.1.36 Indication Type

Void.

9.2.1.36A Information Exchange Object Type

Void.

9.2.1.36B Information Report Characteristics

The information report characteristics defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Report Characteristics Type	М			
>On Demand >Periodic			NULL	
>>CHOICE Information Report Periodicity Scale	М			The frequency with which the Node B shall send information reports.
>>>minute				
>>>Report Periodicity Value	М		INTEGER (160,)	Unit: min
>>>hour				
>>>Report Periodicity Value	М		INTEGER (124,)	Unit: h
>On Modification		•		
>>Information Threshold	0	•	9.2.1.36E	

9.2.1.36C Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	М		INTEGER (02^20-1)	

9.2.1.36D Information Type

The Information Type indicates which kind of information the Node B shall provide.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Information Type Item	M		ENUMERATED (GPS Information, DGPS Corrections, GPS RX Pos,)	
GPS Information	C-GPS	0 <maxno GPSItems ></maxno 		
>GPS Information Item			ENUMERATED (GPS Navigation Model & Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real-Time Integrity,)	

Condition	Explanation
GPS	The IE shall be present if the <i>Information Type Item</i> IE indicates 'GPS
	Information'.

Range Bound	Explanation
maxNoGPSItems	Maximum number of GPS Information Items supported in one
	Information Exchange

9.2.1.36E Information Threshold

The Information Threshold indicates which kind of information shall trigger the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Type	М			
Item				
>DGPS				
>>PRC Deviation	M		ENUMERATED	PRC deviation in meters from
			(1, 2, 5, 10,)	the previously reported value,
				which shall trigger a report

9.2.1.36F IPDL Indicator

Indicates if IPDL periods shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IPDL Indicator			ENUMERATED (
			active,	
			inactive)	

9.2.1.37 Limited Power Increase

Void.

9.2.1.37A Local Cell Group ID

The Local Cell Group ID represents resources in the Node B, which have been pooled from a capacity point of view.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell Group ID			Local Cell ID 9.2.1.38	

9.2.1.38 Local Cell ID

The local cell ID represents resources in the Node B that can be used for the configuration of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Local Cell ID			INTEGER (0268435455)	

9.2.1.38A MAC-d PDU Size

The MAC-d PDU Size provides the size in bits of the MAC-d PDU.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-d PDU Size			INTEGER	
			(15000,)	

9.2.1.38aa 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.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-es Guaranteed Bit Rate			INTEGER (02^24- 1,)	Unit: bit/s

9.2.1.38Aa MAC-hs Guaranteed Bit Rate

The MAC-hs Guaranteed Bit Rate IE indicates the guaranteed number of bits per second that Node B should deliver over the air interface under normal operating conditions (provided there is data to deliver).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Guaranteed Bit Rate			INTEGER (02^24-1,)	Unit: bit/s

9.2.1.38Ab MAC-hs Reordering Buffer Size for RLC-UM

The *MAC-hs Reordering Buffer Size for RLC-UM* IE indicates the portion of the buffer in the UE that can be used for RLC-UM traffic (i.e. for Priority Queues whose *RLC Mode* IE is set to "RLC-UM").

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Reordering Buffer Size			INTEGER (0300,)	Unit: kBytes And N kBytes = N*1024 Bytes. The Node B shall use this value to avoid the overflow of the MAC-hs reordering buffer.

9.2.1.38B MAC-hs Window Size

The MAC-hs Window Size IE is used for MAC-hs PDU retransmission as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Window Size			ENUMERATED (4, 6, 8, 12, 16, 24, 32)	

9.2.1.39 Maximum DL Power Capability

This parameter indicates the maximum DL power capability for a local cell or a Power Local Cell Group within the Node B. The reference point is the antenna connector. If Transmit Diversity can be used in the local cell, the parameter indicates the maximum for the linear sum of the power that can be used on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum DL Power Capability			INTEGER (0500)	Unit: dBm
				Range: 050 dBm
				Step: 0.1 dB

9.2.1.39a Maximum Number Of Retransmissions For E-DCH

The *Maximum Number Of Retransmissions For E-DCH* IE specifies the upper boundary for retransmissions for a single MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number Of			INTEGER	
Retransmissions For E-DCH			(015)	

9.2.1.40 Maximum Transmission Power

The Maximum Transmission Power is the maximum value for the linear sum of the power of all downlink physical channels, that is allowed to be used in a cell. If Transmit Diversity is applied to one downlink physical channel, the power to be considered for this downlink physical channel is the linear sum of the power used for this downlink physical channel on all branches. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Transmission Power			INTEGER (0500)	Unit: dBm Range: 050
				Step: 0.1 dB

9.2.1.40A Measurement Availability Indicator

Void.

9.2.1.40B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale	M			
>millisecond				
>>Measurement Change	M		INTEGER	Unit: ms
Time Value			(16000,)	Range: 1060000 ms
				Step: 10 ms

9.2.1.41 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Filter Coefficient			ENUMERATED (
			0, 1, 2, 3, 4, 5, 6, 7,	
			8, 9, 11, 13, 15, 17,	
			19,)	ļ

9.2.1.41A Measurement Hysteresis Time

The Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the Measurement Reporting procedure to be triggered.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale	M			
>millisecond				
>>Measurement Hysteresis	M		INTEGER	Unit: ms
Time Value			(16000,)	Range: 1060000 ms Step: 10 ms

9.2.1.42 Measurement ID

The Measurement ID uniquely identifies any measurement per (Node B or Communication) Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			INTEGER (02^20-1)	

9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Increase/Decrease Threshold	М				-	
>Received Total Wide Band Power					_	
>>Received Total Wide Band Power	М		INTEGER (0620)	Unit: dB Range: 062 dB Step: 0.1 dB	_	
>Transmitted Carrier Power					_	
>>Transmitted Carrier Power	М		INTEGER (0100)	According to mapping in [22] and [23]	_	
>Acknowledged PRACH Preambles				FDD only	_	
>>Acknowledged PRACH Preambles	М		INTEGER (0240,)	According to mapping in [22]	_	
>UL Timeslot ISCP			,	TDD only	_	
>>UL Timeslot ISCP	M		INTEGER (0126)	Unit: dB Range: 063 dB Step: 0.5 dB	_	
>SIR					_	
>>SIR	M		INTEGER (062)	Unit: dB Range: 031 dB Step: 0.5 dB	_	
>SIR Error				FDD only	_	
>>SIR Error	M		INTEGER (0124)	Unit: dB Range: 062 dB Step: 0.5 dB	_	
>Transmitted Code Power					_	
>>Transmitted Code Power	M		INTEGER (0112,)	Unit: dB Range: 056 dB Step: 0.5 dB	_	
>RSCP				TDD only	_	
>>RSCP	М		INTEGER (0126)	Unit: dB Range: 063 dB Step: 0.5 dB	_	
>Round Trip Time				FDD only	_	
>>Round Trip Time	М		INTEGER (032766)	Unit: chips Range: 0 2047.875 chips Step: 0.625 chips	_	
>Acknowledged PCPCH Access Preambles				FDD only	_	
>>Acknowledged PCPCH Access Preambles	М		INTEGER (015,)	According to mapping in [22]	-	
>Detected PCPCH Access Preambles				FDD only	_	
>>Detected PCPCH Access Preambles	М		INTEGER (0240,)	According to mapping in [22]	_	
>Additional Measurement Thresholds					_	
>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission					-	
>>>Transmitted Carrier Power Of	М		INTEGER (0100)	According to mapping in [22] and [23]	YES	reject

		1	T	1	
All Codes Not Used For HS- PDSCH Or HS- SCCH Transmission					
>>Transmitted Carrier Power For Cell Portion			FDD only	_	
>>>Transmitted Carrier Power For Cell Portion	M	INTEGER (0100)	Mapping identical to the one for Transmitted Carrier Power measurement in [22]	YES	reject
>>Received Total Wide Band Power For Cell Portion			FDD only	_	
>>>Received Total Wide Band Power For Cell Portion	M	INTEGER (0620)	Unit: dB Range: 062 dB Step: 0.1 dB	YES	reject
>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission For Cell Portion			FDD only	-	
>>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS- SCCH Transmission For Cell Portion	M	INTEGER (0100)	Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS-SCCH Transmission measurement in [22]	YES	reject
>>UpPTS interference			1.28Mcps TDD Only	_	
>>>UpPTS interference Value	M	INTEGER (0127,)	According to mapping in [23]	YES	reject

9.2.1.43A Measurement Recovery Behavior

This IE controls the Measurement Recovery Behavior.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Behavior			NULL	

9.2.1.43B Measurement Recovery Reporting Indicator

This IE indicates the Measurement Recovery Reporting.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery			NULL	
Reporting Indicator				

9.2.1.43C Measurement Recovery Support Indicator

This IE indicates the Measurement Recovery Support.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Support Indicator			NULL	

9.2.1.44 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E, F or On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Threshold	М				_	
>Received Total Wide Band Power					_	
>>Received Total Wide Band Power	М		INTEGER (0621)	According to mapping in [22] and [23]	_	
>Transmitted Carrier Power			(0021)	111 [22] and [20]	_	
>>Transmitted Carrier Power	М		INTEGER (0100)	According to mapping in [22] and [23]	_	
>Acknowledged PRACH Preambles			(6.1.00)	FDD only	_	
>>Acknowledged PRACH Preambles	М		INTEGER (0240,)	According to mapping in [22]	_	
>UL Timeslot ISCP				TDD only	_	
>>UL Timeslot ISCP	М		INTEGER (0127)	According to mapping in [23]	-	
>SIR					_	
>>SIR	М		INTEGER (063)	According to mapping in [22] and [23]	_	
>SIR Error				FDD only	_	
>>SIR Error	М		INTEGER (0125)	According to mapping in [22]	-	
>Transmitted Code Power					_	
>>Transmitted Code Power	M		INTEGER (0127)	According to mapping in [22] and [23]	_	
>RSCP				TDD only	_	
>>RSCP	M		INTEGER (0127)	According to mapping in [23]	_	
>Rx Timing Deviation				Applicable to 3.84Mcps TDD only	_	
>>Rx Timing Deviation	M		INTEGER (08191)	According to mapping in [23]	_	
>Round Trip Time				FDD only	_	
>>Round Trip Time	M		INTEGER (032767)	According to mapping in [22]	_	
>Acknowledged PCPCH Access Preambles				FDD only	_	
>>Acknowledged PCPCH Access Preambles	М		INTEGER (015,)	According to mapping in [22]	_	
>Detected PCPCH Access Preambles				FDD only	_	
>>Detected PCPCH Access Preambles	М		INTEGER (0240,)	According to mapping in [22]	-	
>Additional Measurement Thresholds					_	
>>UTRAN GPS Timing Of Cell Frames For UE Positioning					_	
>>>T _{UTRAN-GPS} Measurement Threshold Information	М		9.2.1.64B		YES	reject
>>SFN-SFN Observed Time Difference					_	
>>>SFN-SFN Measurement Threshold	M		9.2.1.53C		YES	reject

	1				1
Information			A 1: 11 /		
>>Rx Timing Deviation LCR			Applicable to 1.28Mcps TDD Only		
>>>Rx Timing Deviation LCR	M	INTEGER (0511)	According to mapping in [23]	YES	reject
>>HS-SICH Reception Quality			Applicable to TDD Only	_	
>>>HS-SICH Reception Quality	М	INTEGER (020)	According to mapping in [23]	YES	reject
>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission		(**************************************		-	
>>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS- SCCH Transmission	M	INTEGER (0100)	According to mapping in [22] and [23]	YES	reject
>>HS-DSCH Reguired Power				_	
>>>HS-DSCH Required Power Value	М	9.2.1.31lba		YES	reject
>>Transmitted Carrier Power For Cell Portion			FDD only	_	
>>>Transmitted Carrier Power For Cell Portion	М	INTEGER (0100)	Mapping identical to the one for Transmitted Carrier Power measurement in [22]	YES	reject
>>Received Total Wide Band Power For Cell Portion			FDD only	_	
>>>Received Total Wide Band Power For Cell Portion	M	INTEGER (0621)	Mapping identical to the one for Received Total Wide Band Power measurement in [22]	YES	reject
>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission For Cell Portion			FDD only	-	
>>> Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS- SCCH Transmission Value For Cell Portion	M	INTEGER (0100)	Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS-SCCH Transmission measurement in [22]	YES	reject
>>UpPTS interference			1.28Mcps TDD Only	_	
>>>UpPTS interference Value	M	INTEGER (0127,)	According to mapping in [23]	YES	reject
>>DL Transmission Branch Load			FDD Only	_	
>>>DL Transmission Branch Load	М	INTEGER (0101,)	According to mapping in [22]	YES	reject

Value					
>>HS-DSCH			FDD only	_	
Required Power			-		
For Cell Portion					
>>>HS-DSCH	M	9.2.1.31lba		YES	reject
Required Power					
Value For Cell					
Portion					

9.2.1.45 Message Discriminator

This field is used to discriminate between Dedicated NBAP and Common NBAP messages.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator			ENUMERATED (
			Common,	
			Dedicated)	

9.2.1.45A Message Structure

The *Message Structure* IE gives information for each level with assigned criticality in an hierarchical message structure from top level down to the lowest level above the reported level for the occurred error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Structure		1 <maxno oflevels></maxno 		The first repetition of the Message Structure IE corresponds to the top level of the message. The last repetition of the Message Structure IE corresponds to the level above the reported level for the occurred error of the message.
>IE ID	M		INTEGER (065535)	The IE ID of this level"s IE containing the not understood or missing IE.
>Repetition Number	O		INTEGER (1256)	The Repetition Number IE gives, if applicable, the number of occurrences of this level"s reported IE up to and including the occurrence containing the not understood or missing IE. Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.

Range Bound	Explanation
maxnooflevels	Maximum number of message levels to report. The value for
	maxnooflevels is 256.

9.2.1.46 Message Type

The Message Type uniquely identifies the message being sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Procedure ID	M	1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
>Procedure Code	M		INTEGER (0255)	"0" = Audit "1" = Audit Required "2" = Block Resource "3" = Cell Deletion "4" = Cell Reconfiguration "5" = Cell Setup "6" = Common Measurement Failure "7" = Common Measurement Initiation "8" = Common Measurement Report "9" = Common Measurement Termination "10" = Common Transport Channel Delete "11" = Common Transport Channel Setup "13" = Reset "14" = Compressed Mode Command "16" = Dedicated Measurement Failure "17" = Dedicated Measurement Initiation "18" = Dedicated Measurement Termination "19" = Dedicated Measurement Termination "20" = Downlink Power Control "21" = Error Indication (For Dedicated Procedures) "23" = Radio Link Addition "24" = Radio Link Failure "26" = Radio Link Restoration "27" = Radio Link Setup "28" = Resource Status Indication "29" = Synchronised Radio Link Reconfiguration Cancellation "30" = Synchronised Radio Link Reconfiguration Commit "31" = Synchronised Radio Link Reconfiguration Preparation "32" = System Information Update "33" = Unblock Resource "34" = Unsynchronised Radio Link Reconfiguration Preparation "32" = System Information Update "33" = Unblock Resource "34" = Unsynchronised Radio Link Reconfiguration Preparation "32" = System Information Update "33" = Physical Shared Channel Reconfiguration "35" = Error Indication (For Common Procedures) "37" = Physical Shared Channel Reconfiguration "40" = Information Exchange Failure "41" = Information Exchange Failure "41" = Information Exchange Termination "42" = Information Reporting "44" = Cell Synchronisation Adjustment "45" = Cell Synchronisation Reporting "44" = Cell Synchronisation Reporting "48" = Cell Synchronisation Re
>Ddmode	M		ENUMERATED (TDD, FDD,	Common = common to FDD and TDD.
Type of Massacs	M		Common,)	
Type of Message	M		ENUMERATED (

Initiating	
Message,	
Successful	
Outcome,	
Unsuccessful	
Outcome,	
Outcome)	

9.2.1.46a MICH CFN

The MICH CFN indicates the Connection Frame Number for the MICH. It corresponds to the Cell SFN of the frame in which the start of the S-CCPCH frame is located, see ref [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MICH CFN			INTEGER (04095)	

9.2.1.46A Minimum DL Power Capability

This parameter indicates the minimum DL power capability for a local cell within the Node B. The reference point is the antenna connector. If Transmit Diversity can be used in the local cell, the parameter indicates the minimum for the linear sum of the power that can be used on all branches.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Minimum DL Power Capability			INTEGER (0800)	Unit: dBm
				Range: -30 +50 dBm
				Step: 0.1 dB

9.2.1.47 Minimum Spreading Factor

This parameter indicates the minimum spreading factor supported at a cell within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading Factor			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512)	[TDD – Mapping scheme for the minimum spreading factor 1 and 2: '256' means 1 '512' means 2]

9.2.1.47a Modification Period

The Modification Period of the MICH, see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Modification Period			ENUMERATED (5120, 10240,)	Unit: ms

9.2.1.47A N_INSYNC_IND

This parameter is used by the Node B for achievement/re-achievement of UL synchronisation on the Uu interface as defined in ref. [10] and [21].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_INSYNC_IND			INTEGER (1256)	

9.2.1.47B N OUTSYNC IND

This parameter defines the number of consecutive out-of-sync indications after which the timer T_RLFAILURE shall be started (see also ref. [10] and [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_OUTSYNC_IND			INTEGER (1256)	

9.2.1.47C Neighbouring FDD Cell Measurement Information

This IE provides information on the FDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nd [14]
Primary Scrambling Code	M		9.2.2.34	

9.2.1.47D Neighbouring TDD Cell Measurement Information

This IE provides information on the 3.84Mcps TDD neighbouring cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time Slot* IE and *Midamble Shift And Burst Type* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot	0		9.2.3.23	
Midamble Shift And Burst Type	0		9.2.3.7	

9.2.1.47E Neighbouring TDD Cell Measurement Information LCR

This IE provides information on the neighbouring 1.28Mcps TDD cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time Slot LCR* IE and *Midamble Shift LCR* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-ld	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot LCR	0		9.2.3.24A	
Midamble Shift LCR	0		9.2.3.7A	

9.2.1.47F NI

The NI IE provides a Notification Indicator determined as specified in [37].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NI			INTEGER (065535)	

9.2.1.48 Node B Communication Context ID

The Node B Communication Context ID is the identifier of the Communication Context in the Node B, it corresponds to the dedicated resources which are necessary for an UE using one or more dedicated channels in a given Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Node B Communication Context ID			INTEGER (02^20-1)	"2^20-1" is a reserved value indicating all the existing and future Node B Communication Contexts that can be reached by the Communication Control Port (All NBCC).

9.2.1.49 Payload CRC Presence Indicator

This parameter indicates whether FP payload 16 bit CRC is used or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Payload CRC Presence Indicator			ENUMERATED (CRC Included, CRC Not Included,)	

9.2.1.49A PICH Power

The *PICH Power* IE indicates a power level relative to the [FDD - Primary CPICH power] [TDD - Primary CCPCH power] configured in a cell. If Transmit Diversity is applied to the PICH (resp. the MICH), the *PICH Power* IE indicates the power offset between the linear sum of the power for the PICH (resp. the MICH) on all branches and the [FDD - Primary CPICH power] [TDD - Primary CCPCH power] configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Power			INTEGER (-10+5)	Unit: dB
				Range: -10 +5 dB
				Step: 1dB

9.2.1.49B Power Local Cell Group ID

The Power Local Cell Group ID represents resources in the Node B which have been pooled from a DL power capability point of view.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Local Cell Group ID			Local Cell ID 9.2.1.38	

9.2.1.49C Priority Queue ID

The Priority Queue ID provides the identity of the Priority Queue. The Priority Queue ID is unique across all MAC-d flows that are currently allocated for one Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Priority Queue ID			INTEGER (07)	

9.2.1.49D Process Memory Size

The *Process Memory Size* IE is the size of an HARQ process in the Node B expressed in bits. It provides the maximum number of soft channel bits in the virtual IR buffer [8] or [34].

IE/Group Name	Presence	Range	IE Type and Reference	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,)	

9.2.1.50 Puncture Limit

The Puncture Limit limits the amount of puncturing that can be applied in order to minimise the number of dedicated physical channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Puncture Limit			INTEGER (015)	Unit: % Range: 40100 % Step: 4 % 100% means no puncturing

9.2.1.50A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
QE-Selector			ENUMERATED (
			Selected,	
			Non-Selected)	

9.2.1.51 Report Characteristics

The report characteristics define how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Report Characteristics	М				_	
>On Demand			NULL		_	
>Periodic			NOLL		_	
>>Report Periodicity	M		9.2.1.51a	The frequency with which the Node B shall send measurement reports.	-	
>Event A					_	
>>Measurement Threshold	M		9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	-	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>Event B					_	
>>Measurement Threshold	M		9.2.1.44	The threshold for which the Node B shall trigger a measurement report.	-	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>Event C		1	00115		_	
>>Measurement Increase/Decrease Threshold	M		9.2.1.43		_	
>>Measurement Change Time	М		9.2.1.40B	The time the measurement entity shall rise on (in ms), in order to trigger a measurement report.	_	
>Event D					_	
>>Measurement Increase/Decrease Threshold	M		9.2.1.43		_	
>>Measurement Change Time	M		9.2.1.40B	The time the measurement entity shall fall (in ms), in order to trigger a measurement report.	_	
>Event E				,	_	
>>Measurement Threshold 1	М		Measurement Threshold 9.2.1.44		-	
>>Measurement Threshold 2	0		Measurement Threshold 9.2.1.44		_	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>>Report Periodicity	0		9.2.1.51a	The frequency with which the Node B shall send measurement reports.	_	
>Event F					_	
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44		_	
>>Measurement Threshold 2	0		Measurement Threshold 9.2.1.44		_	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>>Report Periodicity	0		9.2.1.51a	The frequency with which the Node B shall send	_	

				measurement reports.		
>Additional Report					_	
Characteristics						
>>On Modification					_	
>>>On		1			YES	reject
Modification						.,
>>>Measurem	M		9.2.1.44		_	
ent Threshold						

9.2.1.51a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity 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

9.2.1.51A Requested Data Value

The *Requested Data Value* IE contains the relevant data concerning the ongoing information exchange. The *Requested Data Value* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DGPS Corrections	0		9.2.1.24B	
GPS Navigation Model & Time Recovery	0		9.2.1.31B	
GPS Ionospheric Model	0		9.2.1.31C	
GPS UTC Model	0		9.2.1.31D	
GPS Almanac	0		9.2.1.31F	
GPS Real-Time Integrity	0		9.2.1.31E	
GPS RX Pos	0		9.2.1.31G	

9.2.1.51B Requested Data Value Information

The *Requested Data Value Information* IE provides information on whether or not the Requested Data Value is available in the message and also the Requested Data Value itself if available. In case of "Periodic" and "On Modification" reporting, "Information Not Available" shall be used when at least one part of the requested information was not available at the moment of initiating the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Availability Indicator	M			
>Information Available				
>>Requested Data Value	M		9.2.1.51A	
>Information Not Available			NULL	

9.2.1.52 Resource Operational State

The Resource Operational State is used to indicate the current operational state of the associated resource following a Node B failure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Resource Operational State			ENUMERATED (Enabled, Disabled)	When a resource is marked as disabled, then its child resources are implicitly disabled. Cell Resource hierarchy can be referred to [6].

9.2.1.52A Retention Priority

Void.

9.2.1.52B RLC Mode

The RLC Mode IE indicates the RLC Mode used for a Priority Queue.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RLC Mode			ENUMERATED (
			RLC-AM, RLC-	
			UM,)	

9.2.1.53 RL ID

The RL ID is the unique identifier for one RL associated with a UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL ID			INTEGER (031)	

9.2.1.53a RNC-ld

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-Id			INTEGER (04095)	

9.2.1.53A SFN

System Frame Number of the cell, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			INTEGER (04095)	

9.2.1.53B Segment Type

Segment type as defined in [18].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Segment Type			ENUMERATED (
			First segment,	
			First segment short,	
			Subsequent	
			segment,	
			Last segment,	
			Last segment short,	
			Complete SIB,	
			Complete SIB short,	
)	

9.2.1.53C SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN-SFN Change Limit	0		INTEGER(1256)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit: chip Step: 1/16 chip
Predicted SFN-SFN Deviation Limit	0		INTEGER(1256)	Deviation of the predicated SFN-SFN from the latest measurement result, which shall trigger a new report. Unit: chip Step: 1/16 chip

9.2.1.53D SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN	М		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	M		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	М		9.2.3.23	Indicates the Time Slot of the reference cell at which this measurement has been performed.

9.2.1.53E SFN-SFN Measurement Value Information

The *SFN-SFN Measurement Value Information* IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		1 <maxno MeasNCell ></maxno 		
>UC-ld	М		9.2.1.65B	
>SFN-SFN Value	М		9.2.1.53F	
>SFN-SFN Quality	0		INTEGER (0255)	Indicates the standard deviation (std) of the SFN-SFN Observed Time Difference measurements in 1/16 chip. SFN-SFN Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Value, where x is the reported SFN-SFN Value and $\mu = E[x]$ is the expectation value of x.
>SFN-SFN Drift Rate	М		INTEGER (-100+100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	0		INTEGER (0100)	Indicates the standard deviation (std) of the SFN-SFN drift rate measurements in 1/256 chip per second. SFN-SFN Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Drift Rate, where x is the reported SFN-SFN Drift Rate and μ = $E[x]$ is the expectation value of x.
>SFN-SFN Measurement Time Stamp	М		9.2.1.53D	
Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		0 <maxno MeasNCell -1></maxno 		
>UC-ld	M		9.2.1.65B	

Range Bound	Explanation
maxnoMeasNCell	Maximum number of neighbouring cells that can be measured on

9.2.1.53F SFN-SFN Value

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN-SFN	M		INTEGER	According to mapping in [22].
			(0614399)	
>TDD		•		
>>SFN-SFN	M	•	INTEGER (040961)	According to mapping in [23].

9.2.1.53G RL Specific DCH Information

The *RL Specific DCH Information* IE provides RL specific DCH Information for DCHs. In the case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE shall be included only for one of the DCHs in the set of co-ordinated DCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Specific DCH Information		1 <maxno ofDCHs></maxno 		
>DCH ID	M		9.2.1.20	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

9.2.1.53H Scheduling Priority Indicator

Indicates the relative priority of the HS-DSCH or E-DCH data frame. Used by the Node B when scheduling HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scheduling Priority Indicator			INTEGER (015)	Relative priority of the HS- DSCH or E-DCH data frame: "0" =Lowest Priority
				"15" =Highest Priority

9.2.1.53Ha Serving E-DCH RL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving E-DCH RL	M			
>Serving E-DCH RL in this Node B				
>>Serving E-DCH RL ID	М		RL ID 9.2.1.53	
>Serving E-DCH RL not in this Node B			NULL	

9.2.1.53I SID

The SID IE provides the identity of the Size Index.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SID			INTEGER (07)	

9.2.1.54 SIB Deletion Indicator

Void.

9.2.1.55 SIB Originator

Indicates if the Node B shall fill in the SIB information or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIB Originator			ENUMERATED (Node B, CRNC,)	

9.2.1.55A Signalling Bearer Request Indicator

The Signalling Bearer Request Indicator IE indicates if a new signalling bearer needs to be established for the control of Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Signalling Bearer Request			ENUMERATED	
Indicator			(Bearer Requested)	

9.2.1.56 Shutdown Timer

The shutdown timer shall indicate the length of time available to the CRNC to perform the block of a resource when a Normal priority block is requested.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Shutdown Timer			INTEGER (13600)	Unit: second

9.2.1.56a T1

The T1 IE is used as described in ref [32] subclause 11.6.2.3.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
T1			ENUMERATED (10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 120, 140, 160, 200, 300, 400,)	Unit: ms Node B may use this value to stop the re-transmission of the corresponding MAC-hs PDU.

9.2.1.56A T_RLFAILURE

The Radio Link Failure procedure shall be triggered after a period of time T_RLFAILURE has elapsed with a persisting out-of-sync indication (see also ref. [10] and [21]).

Information Element/Group	Presence	Range	IE Type and	Semantics Description
Name			Reference	-
T_RLFAILURE			INTEGER (0255)	Unit: second
				Range: 0 25.5 s
				Step: 0.1 s

9.2.1.56B Start Of Audit Sequence Indicator

Indicates if the AUDIT REQUEST message initiates a new audit sequence or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Start Of Audit Sequence Indicator			ENUMERATED (Start Of Audit Sequence, Not Start Of Audit Sequence)	

9.2.1.56C TFCI2 Bearer Request Indicator

TFCI2 Bearer Request Indicator IE indicates if a new transport bearer on which the DSCH TFCI Signaling control frames shall be received is required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI2 Bearer Request			ENUMERATED	
Indicator			(New Bearer	
			Requested)	

9.2.1.57 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. [TDD - If it is present in the timeslot, it will be mapped to the channelisation code defined by [19].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI presence			ENUMERATED (
			Present,	
			Not Present)	

9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field 2) value' in the second group. The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

 $The \ mapping \ between \ TFCI (field 2) \ value \ and \ CTFC (field 2) \ is \ spelt \ out \ explicitly \ for \ each \ value \ of \ TFCI \ (field 2) \]$

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE DSCH	М			
>No split in TFCI				This choice is made if: a) The TFCS refers to the Uplink. OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels. OR
>>TFCS		1 <maxno ofTFCs></maxno 		c) The mode is TDD. The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on. [TDD - The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		9.2.1.18A	
>>>CHOICE Gain	C-			
Factors	PhysChan			
>>>Signalled Gain Factors				
>>>>CHOICE Mode	M			
>>>>FDD				
>>>>>Gain Factor β _C	M		INTEGER (015)	For UL DPCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9]
>>>>>Gain Factor β _D	M		INTEGER (015)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD: mapping in accordance to [9]
>>>>TDD				
>>>>Gain Factor β	М		iNTEGER (015)	For UL DPCH in TDD; mapping in accordance to [20].
>>>>Reference TFC	0		INTEGER (03)	If this TFC is a reference TFC, this IE indicates the reference number.
>>>Computed Gain Factors				
>>>>Reference TFC nr	М		INTEGER (03)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>There is a split in the TFCI				This choice is made if: a) The TFCS refers to the Downlink. AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels.
>>Transport Format Combination DCH		1 <maxtf CI_1_Com bs></maxtf 		The first instance of the Transport Format Combination DCH IE corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	М		CTFC 9.2.1.18A	, , , , , , , , , , , , , , , , , , , ,
>>CHOICE Signalling Method	М			
>>>TFCI Range				
>>>>TFC Mapping On DSCH		1 <maxno TFCIGrou</maxno 		

		ps>		
>>>>Max TFCI(field2) Value	М		INTEGER (11023)	This is the Maximum value in the range of TFCI(field2) values for which the specified CTFC(field2) applies
>>>>CTFC(field2)	М		CTFC 9.2.1.18A	
>>>Explicit				
>>>>Transport Format Combination DSCH		1 <maxtf CI_2_Com bs></maxtf 		The first instance of the Transport Format Combination DSCH IE corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>CTFC(field2)	M		CTFC 9.2.1.18A	

Condition Explanation	
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH
	channel [FDD – or PCPCH channel].

Range Bound	Explanation
maxnoofTFCs	The maximum number of Transport Format Combinations
maxTFCI_1_Combs	Maximum number of TFCI (field 1) combinations (given by 2 raised to
	the power of the length of the TFCI (field 1))
maxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to
	the power of the length of the TFCI (field 2))
maxNoTFCIGroups	Maximum number of groups, each group described in terms of a
	range of TFCI(field 2) values for which a single value of CTFC(field2)
	applies

9.2.1.58A TNL QoS

This IE indicates the TNL QoS characteristics of the transport bearer for the uplink data traffic.

When the DS Field IE is used, the value of this IE is configurable by the operator.

When the *Generic Traffic Category* IE is used, generic traffic categories are implementation-specific (e.g. they may be determined by the sender from the application parameters). The value assigned to each of these categories and sent in the *Generic Traffic Category* IE is configurable by the operator, as well as the mapping of this value to DS field [35] at the Node B side.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TNL QoS type	M			
>DS Field				
>>DS Field	M		BIT STRING (8)	DS Field as defined in [35]. Typically used when the NodeB and its CRNC are in the same DS domain as defined in [36].
>Generic Traffic Category				
>>Generic Traffic Category	M		BIT STRING (8)	

9.2.1.59 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

[TDD - The Transport Format Set for each transport channel within the same CCTrCH shall have the same value for the 2^{nd} Interleaving Mode IE.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dynamic Transport Format Information		1 <maxtf count></maxtf 		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	M		INTEGER (0512)	
>Transport Block Size	C-Blocks		INTEGER (05000)	Unit: Bits
>CHOICE Mode	M			
>>TDD				
>>>Transmission Time Interval Information	C- TTldynami c	1 <maxtt Icount></maxtt 		
>>>Transmission Time Interval	М		ENUMERATED (10, 20, 40, 80,)	Unit: ms
Semi-Static Transport Format Information		1		
>Transmission Time Interval	M		ENUMERATED (10, 20, 40, 80, dynamic,,5)	Unit: ms; Value "dynamic' for TDD only; Value "5' for LCR TDD only
>Type Of Channel Coding	М		ENUMERATED (No codingTDD, Convolutional, Turbo,)	[FDD - The value "No codingTDD" shall be treated as logical error if received]
>Coding Rate	C-Coding		ENUMERATED (1/2, 1/3,)	
>Rate Matching Attribute	М		INTEGER (1maxRM)	
>CRC Size	М		ENUMERATED (0, 8, 12, 16, 24,)	
>CHOICE Mode	M		,	
>>TDD				
>>>2 nd Interleaving Mode	М		ENUMERATED (Frame related, Timeslot related,)	

Condition	Explanation
Blocks	The IE shall be present if the <i>Number Of Transport Blocks</i> IE is set to a value greater than 0.
Coding	The IE shall be present if the <i>Type Of Channel Coding</i> IE is set to "Convolutional" or "Turbo".
TTIdynamic	The IE shall be present if the <i>Transmission Time Interval</i> IE in the <i>Semi-Static Transport Format Information</i> IE is set to "dynamic".

Range Bound	Explanation
maxTFcount	Maximum number of different Transport Formats that can be included
	in the Transport Format Set for one transport channel
maxRM	Maximum number that could be set as rate matching attribute for a
	transport channel
maxTTlcount	The amount of different TTIs that are possible for that Transport
	Format

9.2.1.60 ToAWE

TOAWE is the window endpoint. DL data frames are expected to be received before this window endpoint. TOAWE is defined with a positive value relative Latest Time of Arrival (LTOA). A data frame arriving after TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWE			INTEGER (02559)	Unit: ms

9.2.1.61 ToAWS

TOAWS is the window startpoint. DL data frames are expected to be received after this window startpoint. TOAWS is defined with a positive value relative Time of Arrival Window Endpoint (TOAWE). A data frame arriving before TOAWS gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWS			INTEGER (01279)	Unit: ms

9.2.1.62 Transaction ID

The transaction ID is used to associate all the messages belonging to the same procedure. Messages belonging to the same procedure shall use the same transaction ID.

The transaction ID is determined by the initiating peer of a procedure. For common procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and signalled over the same Node B Control Port. For dedicated procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and initiated towards the same Node B/CRNC context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Transaction ID Length				The Transaction ID shall be interpreted for its integer value, not for the type of encoding ("short' or "long').
>Short				
>>Transaction ID Value	M		INTEGER (0127)	
>Long				
>>Transaction ID Value	M	•	INTEGER (032767)	

9.2.1.62A Transport Bearer Request Indicator

Indicates whether a new transport bearer needs to be established for carrying the concerned transport channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request Indicator			ENUMERATED (Bearer Requested, Bearer Not Requested,)	

9.2.1.63 Transport Layer Address

In case of transport bearer establishment with ALCAP [2][31], this IE contains the address to be used for Transport Network Control Plane signalling to establish the transport bearer according to [2][31].

In order to allow transport bearer establishment without ALCAP, this IE contains the address of the transport bearer to be used for the user plane transport.

For details on the Transport Address used see ref. [2][31].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			BIT STRING (1160,	
			l)	

9.2.1.64 TSTD Indicator

Indicates if TSTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Indicator			ENUMERATED (
			active,	
			inactive)	

9.2.1.64A T_{UTRAN-GPS} Measurement Value Information

The T_{UTRAN-GPS} *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
T _{UTRAN-GPS}		1		Indicates the UTRAN GPS Timing of Cell Frames forUE Positioning. According to mapping in [22]. Significant values range from 0 to 37158911999999.
>MS	M		INTEGER (016383)	Most Significant Part
>LS	M		INTEGER (04294967295)	Least Significant Part
Tutran-gps Quality	0		INTEGER (0255)	Indicates the standard deviation (std) of the $T_{UTRAN-GPS}$ measurements in 1/16 chip. $T_{UTRAN-GPS}$ Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN-GPS}$ Value, where x is the reported $T_{UTRAN-GPS}$ Value and $\mu = E[x]$ is the expectation value of x.
T _{UTRAN-GPS} Drift Rate	M		INTEGER (-50+50)	Indicates the T _{UTRAN-GPS} 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 _{UTRAN-GPS} Drift Rate Quality	0		INTEGER (050)	Indicates the standard deviation (std) of the $T_{UTRAN-GPS}$ drift rate measurements in 1/256 chip per second. $T_{UTRAN-GPS}$ Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN-GPS}$ Drift Rate, where x is the reported $T_{UTRAN-GPS}$ Drift Rate and $\mu = E[x]$ is the expectation value of x.

9.2.1.64B T_{UTRAN-GPS} Measurement Threshold Information

The $T_{UTRAN-GPS}$ Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frames for UE Positioning measurements shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS} Change Limit	0		INTEGER (1256)	Change of T _{UTRAN-GPS} value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T _{UTRAN-GPS} Deviation Limit	0		INTEGER (1256)	Deviation of the predicated T _{UTRAN-GPS} from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.2.1.64C T_{UTRAN-GPS} Accuracy Class

The $T_{UTRAN-GPS}$ Accuracy Class IE indicates the accuracy class of the UTRAN GPS Timing of Cell Frames for UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS} Accuracy Class			ENUMERATED (Accuracy Class A, Accuracy Class B, Accuracy Class C,)	More information about T _{UTRAN-GPS} Measurement Accuracy Class is included in [22].

9.2.1.65 UARFCN

Designates the central frequency of the channel number.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER (016383,)	Unit: MHz Range: 0 3276.6 MHz Step: 0.2 MHz (subclause 5.4.3 in [14] and [15])

9.2.1.65A UL Capacity Credit

The capacity credit indicates to the CRNC the Uplink capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Capacity Credit			INTEGER (065535)	

9.2.1.65B UTRAN Cell Identifier (UC-Id)

The UC-Id (UTRAN Cell identifier) is the identifier of a cell in one UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-Id	M		9.2.1.53a	
C-Id	М		9.2.1.9	

9.2.1.66 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL FP Mode			ENUMERATED (
			Normal,	
			Silent,	
)	

9.2.1.67 UL interference level

Void.

9.2.1.67A UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL SIR			INTEGER (-82173)	Value = UL SIR/10 Unit: dB Range: -8.2 +17.3 dB Step: 0.1 dB

9.2.1.68 Unidirectional DCH Indicator

The *Unidirectional DCH Indicator* IE indicates that the DCH is unidirectional.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Unidirectional DCH Indicator			ENUMERATED (Downlink DCH only, Uplink DCH only)	"Downlink DCH only" shall only be used by TDD.

9.2.2 FDD specific parameters

9.2.2.a ACK-NACK Repetition Factor

The ACK-NACK Repetiton Factor IE indicates the number of consecutive repetitions of the ACK and NACK.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ACK-NACK Repetition Factor			INTEGER (14,)	Step: 1

9.2.2.b ACK Power Offset

The ACK Power Offset IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ ACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ACK Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CM Configuration Change CFN	М		CFN 9.2.1.7	
Transmission Gap Pattern Sequence Status		0 <maxt GPS></maxt 		
>TGPS Identifier	M		INTEGER (1maxTGPS)	If the group is not present, none of the pattern sequences are activated. References an already defined sequence.
>TGPRC	М		INTEGER (0511)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. "0"=Infinity
>TGCFN	М		CFN 9.2.1.7	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.

Range Bound	Explanation
maxTGPS	Maximum number of active pattern sequences. Value 6.

9.2.2.B Adjustment Period

The Adjustment Period IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1256)	Unit: Frames

9.2.2.C Adjustment Ratio

The Adjustment Ratio IE (Radj) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Ratio			INTEGER (0100)	Unit: None
				Range: 01
				Step: 0.01

9.2.2.D AICH Power

The *AICH Power* IE indicates a power level (measured as the power per transmitted acquisition indicator when several AIs are transmitted in parallel) relative to the primary CPICH power configured in a cell. If Transmit Diversity is applied to the AICH, the *AICH Power* IE indicates the power offset between the linear sum of the power for the AICH on all branches and the Primary CPICH power configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Power			INTEGER (-22+5)	Unit: dB
				Range: -22 +5 dB
				Step: 1 dB

9.2.2.1 AICH Transmission Timing

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
AICH Transmission Timing			ENUMERATED	See parameter
			(0, 1)	AICH_Transmission_Timing in
				ref. [7].

9.2.2.1A AP Preamble Signature

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Preamble Signature			INTEGER (015)	Described in ref. [9]

9.2.2.1B AP Sub Channel Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AP Sub Channel Number			INTEGER (011)	Described in ref. [10]

9.2.2.1Ba Best Cell Portions

Best Cell Portions IE indicates the best received cell portions and their SIR values when Cell Portions are defined in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Best Cell Portions		1 <maxno< td=""><td></td><td></td></maxno<>		
		ofBestCell		
		Portions>		
>Cell Portion ID	M		9.2.2.1Ca	
>SIR Value	M		INTEGER (063)	According to mapping in [22]
				and [23]

Range Bound	Explanation
maxnoofBestCellPortions	Maximum number of reported Best Received Cell Portions

9.2.2.1C CD Sub Channel Numbers

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CD Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0' to "subchannel 11'. The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [10].

9.2.2.1Ca Cell Portion ID

Cell Portion ID is the unique identifier for a cell portion within a cell. See [4].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion ID			INTEGER (063,)	

9.2.2.1D Channel Assignment Indication

The Channel Assingment Indication indicates whether CA is active or inactive. When CA is active, CPCH is in Versatile Channel Assingment Method (VCAM) mode and when CA is inactive, CPCH is in UE Channel Selection Method (UCSM) mode. In VCAM mode (CA active), CA message in CD/CA-ICH shall be sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Channel Assignment Indication			ENUMERATED (
			CA Active,	
			CA Inactive)	

9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset relative to the Primary CPICH timing for the DL DPCH or for the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Chip Offset			INTEGER (038399)	Unit: chips

9.2.2.2A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Closed Loop Timing			ENUMERATED (According to ref. [10]
Adjustment Mode			Offset1,	subclause 7.1:
			Offset2,	"Offset1" = slot(j+1)mod15
)	"Offset2" = slot(j+2)mod15

9.2.2.3 Common Channels Capacity Consumption Law

Void.

9.2.2.3A Compressed Mode Deactivation Flag

The Compressed Mode Deactivation Flag indicates whether Compressed Mode shall be deactivated or not in the new RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Compressed Mode			ENUMERATED (
Deactivation Flag			Deactivate,	
			Maintain Active)	

9.2.2.4 Compressed Mode Method

Void.

9.2.2.4A CPCH Allowed Total Rate

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH Allowed Total Rate			ENUMERATED (15, 30, 60, 120, 240, 480, 960, 1920, 2880, 3840, 4800, 5760)	Channel Symbol Rate Unit: ksps

9.2.2.4B CPCH Scrambling Code Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH Scrambling Code Number			INTEGER (079)	Described in ref. [9]

9.2.2.4C CPCH UL DPCCH Slot Format

Indicates the slot format used in UL CPCH message control part, accordingly to ref. [7]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CPCH UL DPCCH Slot Format			INTEGER (02,)	

9.2.2.4Ca CQI Power Offset

The *CQI Power Offset* IE indicates Power offset used in the UL between the HS-DPCCH slots carrying CQI information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

9.2.2.4Cb CQI Repetition Factor

The CQI Repetiton Factor IE indicates the number of consecutive repetitions of the CQI.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Repetition Factor			INTEGER (14,)	Step: 1

9.2.2.4D DCH FDD Information

The DCH FDD Information IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH FDD Information		1 <maxno ofDCHs></maxno 			-	
>Payload CRC Presence Indicator	M		9.2.1.49		_	
>UL FP Mode	М		9.2.1.66		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	M		9.2.1.60		_	
>DCH Specific Info		1 <maxno ofDCHs></maxno 			_	
>>DCH ID	M		9.2.1.20		_	
>>Transport Format Set	M		9.2.1.59	For UL	_	
>>Transport Format Set	M		9.2.1.59	For DL	_	
>>Allocation/Retention Priority	M		9.2.1.1A		_	
>>Frame Handling Priority	М		9.2.1.30		_	
>>QE-Selector	М		9.2.1.50A			
>>Unidirectional DCH Indicator	0		9.2.1.68		YES	reject
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

9.2.2.4E DCHs FDD To Modify

The $DCHs\ FDD\ To\ Modify\ IE$ provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
DCHs FDD To Modify		1 <maxno ofDCHs></maxno 			_	
>UL FP Mode	0		9.2.1.66		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	M		9.2.1.62A		_	
>DCH Specific Info		1 <maxno ofDCHs></maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>Transport Format Set	0		9.2.1.59	For the UL.	_	
>>Transport Format Set	0		9.2.1.59	For the DL.	_	
>>Allocation/Retention Priority	0		9.2.1.1A		-	
>>Frame Handling Priority	0		9.2.1.30		_	
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

9.2.2.5 D-Field Length

Void.

9.2.2.6 Dedicated Channels Capacity Consumption Law

Void.

9.2.2.7 Diversity Control Field

Void.

9.2.2.8 Diversity Indication

Void.

9.2.2.9 Diversity Mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Mode			ENUMERATED (None,	
			STTD, Closed loop mode 1, Closed loop mode 2,	
)	

9.2.2.10 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, accordingly to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER (016,)	

9.2.2.10A DL DPCH Timing Adjustment

The DL DPCH Timing Adjustment indicates that a timing adjustment of the related radio link is required or that an Initial DL DPCH Timing Adjustment has been performed by the Node B. It also indicates whether the timing adjustment consists of a timing advance or a timing delay with respect to the SFN timing. The adjustment always consists of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Timing Adjustment			ENUMERATED (The size of the timing
			timing advance,	adjustment is 256 chips.
	1	l	timing delay)	

9.2.2.11 DL frame type

Void.

9.2.2.12 DL or Global Capacity Credit

Void.

9.2.2.12A DL_power_averaging_window_size

The *DL_power_averaging_window_size* IE defines the window size when Limited Power Increase is used [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL_power_averaging_window _size			INTEGER (160)	Unit: inner loop power adjustments
				Range: 160 Step: 1 adjustment

9.2.2.12B DL Power Balancing Information

The *DL Power Balancing Information* IE provides information for power balancing to be activated in the relevant RL(s).

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Power Adjustment Type	M		9.2.2.27	
DL Reference Power	C-		DL Power	Power on DPCH or on F-
	Common		9.2.1.21	DPCH
DL Reference Power	C-	1 <maxno< td=""><td></td><td></td></maxno<>		
Information	Individual	ofRLs>		
>RL ID	M		9.2.1.53	
>DL Reference Power	M		DL Power	Power on DPCH or on F-
			9.2.1.21	DPCH
Max Adjustment Step	C-		9.2.2.20	
·	CommonO			
	rIndividual			
Adjustment Period	C-		9.2.2.B	
•	CommonO			
	rIndividual			
Adjustment Ratio	C-		9.2.2.C	
-	CommonO			
	rIndividual			

Condition	Explanation
Common	The IE shall be present if the Power Adjustment Type IE is set to
	"Common".
Individual	The IE shall be present if the Power Adjustment Type IE is set to
	"Individual".
CommonOrIndividual	The IE shall be present if the Power Adjustment Type IE is set to
	"Common" or 'Individual".

Range Bound	Explanation
maxnoofRLs	Maximum number of Radio Links for a UE

9.2.2.12C DL Power Balancing Activation Indicator

The DL Power Balancing Activation Indicator IE indicates that the power balancing is activated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Activation			ENUMERATED	
Indicator			(DL Power	
			Balancing Activated)	

9.2.2.12D DL Power Balancing Updated Indicator

The *DL Power Balancing Updated Indicator* IE indicates that the power balancing related parameters is updated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Updated			ENUMERATED (DL	
Indicator			Power Balancing	
			Activated)	

9.2.2.13 DL Scrambling Code

DL scrambling code to be used by the RL. One cell may have multiple DL scrambling codes available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code			INTEGER (015)	"0" = Primary scrambling code of the cell "1""15" = Secondary scrambling code

9.2.2.13A DL TPC Pattern 01 Count

The *DL TPC Pattern 01 Count* IE contains the value of the parameter n, which is used for determining the DL TPC pattern on Radio Links marked with "first RLS" by the *First RLS indicator* IE before UL synchronisation is achieved.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL TPC Pattern 01 Count			INTEGER(030)	

9.2.2.13B DSCH FDD Information

The DSCH FDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH FDD Information		1 <max noofDS CHs></max 			_	
>DSCH ID	M		9.2.1.27		_	
>Transport Format Set	М		9.2.1.59	For DSCH	_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>Frame Handling Priority	M		9.2.1.30		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	M		9.2.1.60		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Range Bound	Explanation
maxnoofDSCHs	Maximum number of DSCHs for one UE

9.2.2.13C DPC Mode

The DPC Mode IE indicates the DPC mode to be applied [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode			ENUMERATED (Mode0, Mode1,)	"Mode0": The Node B shall estimate the UE transmitted TPC command and update the DL power in every slot "Mode1": The Node B shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots

9.2.2.13D DSCH FDD Common Information

The DSCH Common Information includes common information for all DSCHs for one UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Indicator	0		9.2.2.13G	
Enhanced DSCH PC	C- EDSCHPC On		9.2.2.13E	

Condition	Explanation
EDSCHPCOn	The IE shall be present if the Enhanced DSCH PC Indicator IE is set
	to 'Enhanced DSCH PC Active in the UE'.

9.2.2.13Da E-DCH FDD Information

The E-DCH FDD Information IE provides information for an E-DCH to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flows Information	М		9.2.1.29ab	
UE Capabilities Information		1		
>E-DCH Physical Layer Category	М		9.2.2.13Dg	

Range bound	Explanation
maxnoofMACdFlows	Maximum number of MAC-d flows.

9.2.2.13Db E-DCH FDD Information Response

The *E-DCH FDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Specific Information Response		0 <maxno ofEDCHM ACdFlows ></maxno 		
>E-DCH MAC-d Flow ID	M		9.2.1.29ad	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows.

9.2.2.13Dc E-DCH FDD DL Control Channel Information

The *E-DCH FDD DL Control Channel Information* IE provides information for E-DCH specific DL Control Channels to be provided to UE via RRC signalling.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH And E-RGCH/E- HICH FDD Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which E-AGCH, E-RGCH and E-HICH are transmitted.
E-AGCH Channelisation Code	0		FDD DL Channelisation Code Number 9.2.2.14	
E-RNTI	0		9.2.1.29ae	
E-RGCH/E-HICH Channelisation Code	M		FDD DL Channelisation Code Number 9.2.2.14	
E-RGCH Signature Sequence	М		INTEGER (0maxnoofSigSeqE -RGHICH - 1)	
E-HICH Signature Sequence	М		INTEGER (0maxnoofSigSeqE -RGHICH - 1)	

Range bound	Explanation
maxnoofSigSeqE-RGHICH	Maximum number of Signature Sequences for E-RGCH/E-HICH.

9.2.2.13De E-DCH RL Indication

Indicates whether a RL is an E-DCH RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH RL Indication			ENUMERATED(E-	
			DCH, non E-DCH)	

9.2.2.13Df E-DCH FDD Information to Modify

The *E-DCH FDD Information to Modify* IE is used for the modification of an E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Specific Information		0 <maxno ofEDCHM ACdFlows ></maxno 		
>E-DCH MAC-d Flow ID	М		9.2.1.29ad	
>Allocation/Retention Priority	0		9.2.1.1A	
>Transport Bearer Request Indicator	М		9.2.1.62A	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	
>Maximum Number Of Retransmissions For E-DCH	0		9.2.1.39a	
Data Description Indicator		0 <maxno ofDDIs></maxno 		
>E-DCH DDI Value	M		9.2.1.29af	
>Associated E-DCH MAC-d Flow ID	М		E-DCH MAC-d Flow ID 9.2.1.29ad	Shall only refer to an E-DCH MAC-d flow identified by the <i>E-DCH MAC-d Flow ID</i> IE above. Multiple E-DCH DDI Values can be associated with the same E-DCH MAC-d Flow ID.
>MAC-d PDU Size	М		9.2.1.38A	
>Scheduling Priority Indicator	М		9.2.1.53H	
>MAC-es Guaranteed Bit Rate	0		9.2.1.38aa	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxnoofDDls	Maximum number of Data Description Indicators

9.2.2.13Dg E-DCH Physical Layer Category

The *E-DCH Physical Layer Category* IE defines a set of UE radio access capabilities related to E-DCH, as defined in [42].

Note: Coding is FFS.

9.2.2.13Dh E-DCH Transport Format Combination Set (E-TFCS)

Note: Coding is FFS

9.2.2.13Di E-TTI

The E-TTI parameter indicates the Transmission Time Interval for E-DPCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TTI			ENUMERATED	
			(2ms, 10ms)	

9.2.2.13E Enhanced DSCH PC

The Enhanced DSCH PC includes all the parameters which are needed for DSCH power control improvement during soft handover.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Wnd	M		9.2.2.13H	
Enhanced DSCH PC Counter	M		9.2.2.13F	
Enhanced DSCH Power Offset	М		9.2.2.131	

9.2.2.13F Enhanced DSCH PC Counter

The Enhanced DSCH PC Counter parameter gives the number of correct cell ID command to receive in the averaging window, *Enhanced DSCH PC Wnd* IE, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Counter			INTEGER(150)	

9.2.2.13G Enhanced DSCH PC Indicator

The Enhanced DSCH PC Indicator indicates whether Enhanced DSCH PC is in use by the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Indicator			ENUMERATED (Enhanced DSCH PC	
			Active in the UE, Enhanced DSCH PC not Active in the UE)	

9.2.2.13H Enhanced DSCH PC Wnd

The Enhanced DSCH PC Wnd parameter shows the window size to decide primary or non-primary cell, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH PC Wnd			INTEGER (110)	

9.2.2.13I Enhanced DSCH Power Offset

The Enhanced DSCH Power Offset parameter gives the power offset to be added on DSCH when cell is decided to be primary.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced DSCH Power Offset			INTEGER (-150)	Unit: dB
				Range: -15 0 dB
				Step: 1 dB

9.2.2.13la E- RGCH/E-HICH Code Information

This parameter defines the codes which will be assigned for E- RGCH and E-HICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	M			
>replace				
>>E-RGCH/E-HICH Code		1 <maxno ofERGCH EHICHs></maxno 		
>>>Code Number	M		INTEGER (0maxERGCHEHIC HCodeNrComp-1)	
>remove			NULL	

Range Bound	Explanation
MaxnoofERGCHEHICHs	Maximum number of E-RGCH/E-HICH channelisation codes for one cell.
MaxERGCHEHICHCodeNrComp	Maximum number of codes at the defined spreading factor, within the complete code tree

9.2.2.13lb E- AGCH Code Information

This parameter defines the codes which will be assigned for E- AGCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	М			
>replace				
>>E-AGCH Code		1 <maxno ofEAGCHs ></maxno 		
>>>Code Number	M		INTEGER (0maxEAGCHCode NrComp-1)	
>remove			NULL	

Range Bound	Explanation
MaxnoofEAGCHs	Maximum number of E-AGCH chanellisation codes for one cell.
MaxEAGCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the complete code tree

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 ChannelisationCode Number			INTEGER (0511)	According to the mapping in [9]. The maximum value is equal to the DL spreading factor –1.

9.2.2.14A FDD DL Code Information

The FDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD DL Code Information		1 <maxno ofcodes=""></maxno>		
>DL Scrambling Code	M		9.2.2.13	
>FDD DL Channelisation Code Number	М		9.2.2.14	
>Transmission Gap Pattern Sequence Code Information	0		9.2.2.53B	

Range Bound	Explanation
maxnoofCodes	Maximum number of DL code information

9.2.2.15 FDD SCCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD SCCPCH Offset			INTEGER (0149)	Unit: chip Range: 038144 chips Step: 256 chips See ref. [7]

9.2.2.16 FDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD TPC Downlink Step Size			ENUMERATED (0.5, 1, 1.5, 2,)	Unit: dB

9.2.2.16A First RLS Indicator

The *First RLS Indicator* IE indicates if a specific Radio Link and all Radio Links which are part of the same Radio Link Set, shall be considered as the first radio links established towards the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
First RLS Indicator			ENUMERATED (First RLS, Not First RLS,)	

9.2.2.17 Gap Period

Void.

9.2.2.18 Gap Position Mode

Void.

9.2.2.18a HARQ Preamble Mode

The HARQ Preamble Mode IE is used as described as in ref [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERATED ('mode0' means HARQ
			mode0,	Preamble Mode =0
			mode1)	'mode1' means HARQ
			,	Preamble Mode =1

9.2.2.18A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, the Node B shall use the limited power increase algorithm as specified in [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERATED (
			Used,	
			Not Used)	

9.2.2.18B Inner Loop DL PC Status

The *Inner Loop DL PC Status* IE indicates whether inner loop DL control shall be active or inactive for all radio links associated with the context identified by the *Node B Communication Context Id* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERATED (
·			Active,	
			Inactive)	

9.2.2.18C IPDL FDD Parameters

The IPDL FDD Parameters IE provides information about IPDL to be applied for FDD when activated.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
IP SpacingFDD	M		ENUMERATED	See [10]
			(5, 7, 10, 15, 20, 30,	
			40, 50,)	
IP Length	M		ENUMERATED	See [10]
			(5, 10)	
Seed	M		INTEGER (063)	See [10]
Burst Mode Parameters	0		9.2.1.5A	
IP Offset	М		INTEGER (09)	See [10]

9.2.2.18D HS-DSCH FDD Information

The *HS-DSCH FDD Information* IE is used for initial addition of HS-DSCH information to a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flows Information	М		9.2.1.31IA		_	
UE Capabilities Information					_	
>HS-DSCH Physical Layer Category	М		9.2.1.31la		_	
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.38Ab		_	
CQI Feedback Cycle k	M		9.2.2.21B		_	
CQI Repetition Factor	C- CQlCyclek		9.2.2.4Cb		_	
ACK-NACK Repetition Factor	M		9.2.2.a		_	
CQI Power Offset	M		9.2.2.4Ca		_	
ACK Power Offset	M		9.2.2.b		_	
NACK Power Offset	M		9.2.2.23a		_	
HS-SCCH Power Offset	0		9.2.2.181		_	
Measurement Power Offset	0		9.2.2.21C		_	
HARQ Preamble Mode	0		9.2.2.18a		YES	reject

Condition	Explanation	
CQICyclek	The IE shall be present if the CQI Feedback Cycle k IE is set to a	
	value greater than 0.	

9.2.2.18E HS-DSCH FDD Information Response

The HS-DSCH Information Response provides information for HS-DSCH that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow Specific Information Response		0 <maxno ofMACdFI ows></maxno 		
>HS-DSCH MAC-d Flow ID	M		9.2.1.311	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.31Ha	
HS-SCCH Specific Information Response		0 <maxno ofHSSCC Hcodes></maxno 		
>Code Number	M		INTEGER (0127)	
CHOICE HARQ Memory Partitioning	0			
>Implicit				
>>Number of Processes	М		INTEGER (18,)	For HARQ process IDs going from 0 to 'Number of Processes' – 1 the Total number of soft channel bits [33] is partitioned equally between all HARQ processes according to the rules in [18].
>Explicit				
>>HARQ Memory Partitioning Infomation		1 <maxno ofHARQpr ocesses></maxno 		The first instance of the parameter corresponds to HARQ process with identifier 0, the second instance to HARQ process with identifier 1, and so on.
>>>Process Memory Size	М		9.2.1.49D	See [18]

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
MaxnoofHARQprocesses	Maximum number of HARQ processes for one UE

9.2.2.18Ea HS-DSCH FDD Update Information

The *HS-DSCH FDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Indicator	0		9.2.1.31K	
CQI Feedback Cycle k	0		9.2.2.21B	
CQI Repetition Factor	0		9.2.2.4Cb	
ACK-NACK Repetition Factor	0		9.2.2.a	
CQI Power Offset	0		9.2.2.4Ca	
ACK Power Offset	0		9.2.2.b	
NACK Power Offset	0		9.2.2.23a	

9.2.2.18F HS-PDSCH FDD Code Information

This parameter defines the codes which will be assigned for HS-PDSCHs.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Number Of HS-PDSCH Codes	M		INTEGER	
			(0maxHS-PDSCHC	
			odeNrComp-1)	
Start Code Number	C-		INTEGER	
	NumCode		(1maxHS-PDSCHC	
	S		odeNrComp-1)	

Condition	Explanation
NumCodes	The IE shall be present if the Number Of HS-PDSCH Codes IE is set
	to a value greater than 0.

Range Bound	Explanation
MaxHS-PDSCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the
	complete code tree

9.2.2.18G HS-SCCH FDD Code Information

This parameter defines the codes which will be assigned for HS-SCCH. The Node B will assign codes for HS-SCCHs among these codes when it sets up a HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	M			
>replace				
>>HS-SCCH Code		1 <maxno ofHSSCC Hs></maxno 		
>>>Code Number	M		INTEGER (0maxHS-SCCHCo deNrComp-1)	
>remove			NULL	

Range Bound	Explanation
MaxnoofHSSCCHs	Maximum number of HS-SCCHs for one cell.
MaxHS-SCCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the complete code tree

9.2.2.18H HS-SCCH ID

Void.

9.2.2.18I HS-SCCH Power Offset

The HS-SCCH Power Offset IE indicates the Power offset relative to the pilot bits on the DL DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset			INTEGER (0255)	Unit: dB Range: -32 +31.75 dB Step: 0.25 dB

9.2.2.18K Initial DL DPCH Timing Adjustment Allowed

The *Initial DL DPCH Timing Adjustment Allowed* IE indicates that the Node B is allowed to perform a timing adjustment (either a timing advance or a timing delay with respect to the SFN timing) when establishing a radio link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Initial DL DPCH Timing Adjustment Allowed			ENUMERATED (initial DL DPCH	
			Timing Adjustment Allowed)	

9.2.2.19 Max Adjustment Period

Void.

9.2.2.20 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots that can be utilised by the downlink power balancing algorithm. *Max Adjustment Step* IE defines a time period, in terms of number of slots, in which the accumulated power adjustment shall be maximum 1dB. This value does not include the DL inner loop PC adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Adjustment Step			INTEGER (110)	Unit: Slots

9.2.2.20A Max Number Of PCPCHs

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of PCPCHs			INTEGER (164,)	

9.2.2.20B Max Number Of UL E-DPDCHs

Maximum number of uplink E-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 E-			ENUMERATED	
DPDCHs			(1, 2, 4,)	

9.2.2.21 Maximum Number Of UL DPDCHs

Maximum number of uplink DPDCHs to be used during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of UL DPDCHs			INTEGER (16)	

9.2.2.21A Maximum PDSCH Power

The *Maximum PDSCH Power* IE can contain for each a PDSCH SF a maximum PDSCH power. The maximum PDSCH power shall be applied for each individual channelisation code at the concerning SF when used for a PDSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum PDSCH Power SF4	0		DL Power 9.2.1.21	
Maximum PDSCH Power SF8	0		DL Power 9.2.1.21	
Maximum PDSCH Power SF16	0		DL Power 9.2.1.21	
Maximum PDSCH Power SF32	0		DL Power 9.2.1.21	
Maximum PDSCH Power SF64	0		DL Power 9.2.1.21	
Maximum PDSCH Power SF128	0		DL Power 9.2.1.21	
Maximum PDSCH Power SF256	0		DL Power 9.2.1.21	

9.2.2.21B CQI Feedback Cycle k

The CQI Feedback Cycle k IE provides the duration of the CQI feedback cycle.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Feedback Cycle k			ENUMERATED	Unit ms
			(0, 2, 4, 8, 10, 20,	
			40, 80, 160,)	

9.2.2.21C Measurement Power Offset

The Measurement Power Offset IE is used as described in ref [10] subclause 6A.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Power Offset			INTEGER (-1226)	Unit: dB
				Range: -613dB Step: 0.5dB

9.2.2.21D MICH Mode

The number of Notification Indicators (NIs) transmitted in a MICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MICH Mode			ENUMERATED (18, 36, 72, 144,)	Number of NIs per frame

9.2.2.22 Minimum UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH which is used during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code			ENUMERATED	
Length			(4, 8, 16, 32, 64,	
			128, 256,)	

9.2.2.22a Min UL Channelisation Code Length For E-DCH FDD

Minimum UL channelisation code length (spreading factor) of a E-DPDCH during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code			ENUMERATED	
Length for E-DCH			(2, 4, 8, 16, 32, 64,	
)	

9.2.2.23 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiplexing Position			ENUMERATED (
			Fixed,	
			Flexible)	

9.2.2.23a NACK Power Offset

The NACK Power Offset IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ NACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NACK Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

9.2.2.23A N EOT

The N_EOT is defined as number of End of Transmission for release of PCPCH transmission.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_EOT			INTEGER (08)	Unit: TTI Value "8" is never used in this
				release.

9.2.2.23B NF_max

The NF_max is defined as maximum number of Frame in a PCPCH message data part.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NF_max			INTEGER (164,)	

9.2.2.23C N_Start_Message

The N_Start_Message is defined as number of Frames for start message of DL DPDCHs for a CPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_Start_Message			INTEGER (18)	

9.2.2.23D Number Of Reported Cell Portions

Number of Reported Cell Portions indicates the number of Best Cell Portions values which shall be included in the measurement report.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Reported Cell Portions			INTEGER (164,)	

9.2.2.24 Pattern Duration (PD)

Void.

9.2.2.24A PCP Length

Indicates CPCH power control preamble length.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCP Length			ENUMERATED (0, 8)	

9.2.2.25 PDSCH Code Mapping

This IE indicates the association between each possible value of TFCI(field 2) and the corresponding PDSCH channelisation code(s). There are three fundamentally different ways that the UTRAN must choose between in order to signal the mapping information, these are described below. The signalling capacity consumed by the different methods will vary depending on the way in which the UTRAN configures usage of the DSCH. A fourth option is also provided which allows the UTRAN to replace individual entries in the TFCI(field 2) to PDSCH code mapping table with new PDSCH code values.

Method #1 - Using code range

The mapping is described in terms of a number of groups, each group associated with a given spreading factor. Each TFCI(field2) value corresponds to a given PDSCH channelisation code or set of PDSCH codes for multi-code. The Node B maps TFCI(field2) values to PDSCH codes in the following way:

- The PDSCH codes used for TFCI(field 2) = 0 are given by the SF of the Code Group 1 (i.e. first instance in *PDSCH Code Mapping*) and the code numbers between CodeNumber₀ (where CodeNumber₀ = "Start Code Number" of Code Group 1) and CodeNumber₀ + "Multi-Code Info" 1.
- This continues with unit increments in the value of TFCI (Field2) mapped to either unit increments in code numbers or groups of contiguous code numbers in case of multi-code, this until "Stop Code Number" is reached: So the PDSCH codes used for TFCI(field 2) = k (for k > 0 and k < ("Stop Code Number" "Start Code Number" + 1) DIV k) are given by the SF of the Code Group 1 and the code numbers between CodeNumber_k = CodeNumber_{k-1} + "Multi-Code Info" and CodeNumber_k + "Multi-Code Info" 1.
 If "Stop Code Number" = "Start Code Number" + "Multi-Code Info" 1 then this is to be interpreted as defining the mapping between the channelisation code(s) and a single TFCI.
- The Node B constructs its mapping table by repeating this process for all the Code Groups in the order they are instantiated in *PDSCH Code Mapping*. The first TFCI(field 2) value used in each group is the largest TFCI(field 2) value reached in the previous group incremented by one.

Note: This imposes that "Stop Code Number" – "Start Code Number" + 1 is a multiple of the value "Multi-Code Info" for each instance of *PDSCH Code Mapping*. Furthermore, in the case where multi-code is not used, then "Multi-Code Info" = 1 and the process above also applies.

Method #2 - Using TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given PDSCH channelisation code or codes for multicode.

- The set of PDSCH codes specified in the first instance applies for all values of TFCI(field 2) between 0 and the specified "Max TFCI(field2)".
- The process continues in the same way for the following groups with the TFCI(field 2) value starting at the largest value reached in the previous instance incremented by one. So the set of PDSCH codes specified in a given instance apply for all the values of TFCI(field 2) between the "Max TFCI(field2) value" specified in the previous instance incremented by one and the specified "Max TFCI(field2)" of the considered instance.

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Info" – 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #3 - Explicit

The mapping between TFCI(field 2) value and PDSCH channelisation code (or a set of PDSCH codes for multicode) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Info" – 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

Method #4 - Replace

The "TFCI (field2)" value(s) for which the mapping to PDSCH channelisation code (or a set of PDSCH codes for multicode) is changed are explicitly signalled. Furthermore, the new mapping between TFCI(field 2) value and PDSCH channelisation code(s) is spelt out explicitly for each value of TFCI (field2).

A set of PDSCH codes is composed of all the codes between "Code Number" and "Code Number" + "Multi-Code Info" – 1. So if multi-code is not used, the set of PDSCH codes is reduced to one element indicated by the *Code Number* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code	М		9.2.2.13	Scrambling code on which PDSCH is transmitted.
CHOICE Signalling Method >Code Range	М			
>>PDSCH Code Mapping		1 <maxno CodeGrou ps></maxno 		
>>>Spreading Factor	M		ENUMERATED (4, 8, 16, 32, 64, 128, 256,)	
>>>Multi-Code Info	M		INTEGER (116)	
>>>Start Code Number	M		INTEGER (0maxCodeNumCo mp-1)	PDSCH code start, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>>>Stop Code Number	M		INTEGER (0maxCodeNumCo mp-1)	PDSCH code stop, Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>TFCI Range				
>>DSCH Mapping		1 <maxno TFCIGrou ps></maxno 		
>>>Max TFCI(field2) Value	M		INTEGER (11023)	This is the maximum value in the range of TFCI(field 2) values for which the specified PDSCH code applies
>>>Spreading Factor	M		ENUMERATED (4, 8, 16, 32, 64, 128, 256,)	SF of PDSCH code
>>>Multi-Code Info	M		INTEGER (116)	
>>>Code Number	M		INTEGER (0maxCodeNumCo mp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>Explicit				
>>PDSCH Code		1 <maxtf CI_2_Com bs></maxtf 		The first instance of the parameter PDSCH code corresponds to TFCI (field2) = 0, the second to TFCI(field 2) = 1 and so on.
>>>Spreading Factor	M		ENUMERATED (4, 8, 16, 32, 64, 128, 256,)	SF of PDSCH code
>>>Multi-Code Info	M		INTEGER (116)	
>>>Code Number	М		INTEGER (0maxCodeNumCo mp-1)	Code number of PDSCH code. Numbering as described in [18]. The maximum value is equal to the Spreading Factor - 1.
>Replace	.			
>>Replaced PDSCH Code		1 <maxtf CI_2_Com bs></maxtf 		
>>>TFCI (field2)	М		INTEGER (01023)	Value of TFCI(field 2) for which PDSCH code mapping will be changed
>>>Spreading Factor	М		ENUMERATED (4, 8, 16, 32, 64, 128, 256,)	SF of PDSCH code
>>>Multi-Code Info	M	1	INTEGER (116)	
>>>Code Number	M		INTEGER (0maxCodeNumCo mp-1)	Code number of PDSCH code. Numbering as described in [18].

		The maximum value is equal
		to the Spreading Factor - 1.

Range Bound	Explanation
maxCodeNumComp	Maximum number of codes at the defined spreading factor, within the
	complete code tree.
maxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to
	the power of the length of the TFCI field 2)
maxNoTFClGroups	Maximum number of groups, each group described in terms of a
	range of TFCI(field 2) values for which a single PDSCH code applies.
maxNoCodeGroups	Maximum number of groups, each group described in terms of a
	range of PDSCH channelisation code values for which a single
	spreading factor applies.

9.2.2.26 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Mode			ENUMERATED	Number of PIs per frame
			(18, 36, 72, 144,)	

9.2.2.27 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Power Adjustment Type			ENUMERATED (
			None,	
			Common,	
			Individual)	

9.2.2.28 Power Control Mode

Void.

9.2.2.29 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPDCH in case the Node B Communication Context is configured to use DPCH in the downlink or relative to the Reference F-DPCH TX Power in case the Node B Communication Context is configured to use F-DPCH in the downlink or relative to a Secondary CCPCH data field or relative to a DL-DPCCH for CPCH pilot field..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER (024)	Unit: dB
				Range: 06 dB
				Step: 0.25 dB

9.2.2.29A Power_Raise_Limit

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Power_Raise_Limit			INTEGER (010)	Unit: dB
				Range: 010 dB
				Step: 1 dB

9.2.2.30 Power Resume Mode

Void.

9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Signatures			BIT STRING (16)	Each bit indicates availability for a signature, where the signatures are numbered "signature 0' up to "signature 15'. The value 1 of a bit indicates that the corresponding signature is available and the value 0 that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [9].

9.2.2.32 Preamble Threshold

The IE sets the threshold for preamble detection. The ratio between received preamble power during the preamble period and interference level shall be above this threshold in order to be acknowledged.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Threshold			INTEGER (072)	Unit: dB
				Range: -36 0 dB
				Step: 0.5 dB

9.2.2.33 Primary CPICH Power

The Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CPICH, the Primary CPICH power is the linear sum of the power that is used for transmitting the Primary CPICH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Power			INTEGER (-100500)	Value = Primary CPICH Power/10 Unit: dBm Range: -10.0+50.0 dBm Step: 0.1 dB

9.2.2.33A Primary CPICH Usage For Channel Estimation

The *Primary CPICH Usage For Channel Estimation* IE indicates whether the Primary CPICH may be used for channel estimation or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Primary CPICH Usage For			ENUMERATED (
Channel Estimation			Primary CPICH may	
			be used,	
			Primary CPICH shall	
			not be used)	

9.2.2.34 Primary Scrambling Code

The Primary scrambling code to be used in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary Scrambling Code			INTEGER (0511)	

9.2.2.35 Propagation Delay

The Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER (0255)	Unit: chip
				Range: 0765 chips
				Step: 3 chips

9.2.2.36 QE-Selector

Void.

9.2.2.36A Qth Parameter

This parameter indicates the Quality threshold for reliable detection of Primary Cell ID in SSDT [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Qth Parameter			INTEGER (-200)	Unit: dB Range: - 20 0 dB Step: 1 dB

9.2.2.37 RACH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Slot Format			ENUMERATED (03,)	See ref. [7].

9.2.2.38 RACH Sub Channel Numbers

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0' to "subchannel 11'. The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4.

9.2.2.39 RL Set ID

The RL Set ID uniquely identifies one RL Set within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER (031)	

9.2.2.39A Received Total Wide Band Power

The Received total wide band power indicates the UL interference at a certain cell under CRNC, see ref. [4].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Received Total Wide Band			INTEGER (0621)	According to mapping in [22].
Power				

9.2.2.40 S-Field Length

The UE uses the S Field of the UL DPCCH slot to send the SSDT Cell ID to the network.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S Field Length			ENUMERATED (1, 2,)	

9.2.2.41 Scrambling Code Change

Void.

9.2.2.42 Scrambling Code Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scrambling Code Number			INTEGER (015)	Identification of scrambling code see ref. [9].

9.2.2.43 Secondary CCPCH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary CCPCH Slot			INTEGER (017,)	
Format				

9.2.2.43A Secondary CPICH Information Change

The Secondary CPICH Information Change IE indicates modification of information of the Secondary CPICH for channel estimation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Secondary CPICH Information Change	М			
>New Secondary CPICH				
>>Secondary CPICH Information	M		Common Physical Channel ID 9.2.1.13	
>Secondary CPICH Shall Not Be Used			NULL	

9.2.2.44 SSDT Cell Identity

The SSDT Cell ID is a temporary ID for SSDT assigned to a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSDT Cell Identity			ENUMERATED (a, b,, h)	

9.2.2.44A SSDT Cell Identity For EDSCHPC

The SSDT Cell Identity for EDSCHPC is a temporary ID for enhanced DSCH power control assigned to a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSDT Cell Identity For EDSCHPC			SSDT Cell Identity 9.2.2.44	

9.2.2.45 SSDT Cell ID Length

The SSDT Cell ID Length parameter shows the length of the SSDT Cell ID.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
			Reference	
Cell ID Length			ENUMERATED (
			Short,	
			Medium,	
			Long)	

9.2.2.46 SSDT Support Indicator

The SSDT Support Indicator indicates whether a RL supports SSDT or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSDT Support Indicator			ENUMERATED (SSDT Supported, SSDT Not Supported)	

9.2.2.47 SSDT Indication

The SSDT Indication indicates whether SSDT is in use by the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSDT Indication			ENUMERATED (SSDT Active in the UE, SSDT Not Active in the UE)	

9.2.2.48 STTD Indicator

Indicates if STTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Indicator			ENUMERATED (active, inactive,	

9.2.2.49 T Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T Cell			ENUMERATED	Unit: chip
			(0, 1,,9)	Range: 02304 chips
				Step: 256 chips
				See ref. [17]

9.2.2.49A TFCI2 Bearer Information Response

The *TFCI2 Bearer Information Response* IE provides information for TFCI2 bearer that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Binding ID	М		9.2.1.4	
Transport Layer Address	М		9.2.1.63	

9.2.2.50 TFCI Signalling Mode

This parameter indicates if the normal or split mode is used for the TFCI. In the event that the split mode is to be used then the IE indicates whether the split is "Hard" or "Logical", and in the event that the split is "Logical" the IE indicates the number of bits in TFCI (field 2).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Signalling Option	М		ENUMERATED (Normal, Split)	"Normal" : meaning no split in the TFCI field (either "Logical" or "Hard") "Split" : meaning there is a split in the TFCI field (either "Logical" or "Hard")
Split Type	C-lfSplit		ENUMERATED (Hard, Logical)	"Hard": meaning that TFCI (field 1) and TFCI (field 2) are block coded separately. "Logical": meaning that on the physical layer TFCI (field 1) and TFCI (field 2) are concatenated, field 1 taking the most significant bits and field 2 taking the least significant bits). The whole is then encoded with a single block code.
Length Of TFCI2	0		INTEGER (110)	This IE indicates the length measured in number of bits of TFCI (field2).

Condition	Explanation
IfSplit	The IE shall be present if the TFCI Signalling Option IE is set to 'Split'.

9.2.2.51 TGD

Void.

9.2.2.52 TGL

Void.

9.2.2.53 Transmit Diversity Indicator

The Transmit Diversity Indicator indicates whether transmit diversity shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmit Diversity Indicator			ENUMERATED (
			active,	
			inactive)	

9.2.2.53A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Information		1 <maxt GPS></maxt 		
>TGPS Identifier	M	S. 67	INTEGER (1maxTGPS)	Transmission Gap Pattern Sequence Identifier: Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be used.</maxtgps>
>TGSN	М		INTEGER (014)	Transmission Gap Starting Slot Number: The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		INTEGER (114)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	0		INTEGER (114)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		INTEGER (0, 15 269)	Transmission Gap Distance: indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to "0" ("0" =undefined).
>TGPL1	М		INTEGER (1144,)	The duration of transmission gap pattern 1 in frames.
>Not-to-be-used-1	0		INTEGER (1144,)	This IE shall never be included in the IE group. If received it shall be ignored.
>UL/DL Mode	M		ENUMERATED (UL only, DL only, UL/DL)	Defines whether only DL, only UL or combined UL/DL compressed mode is used.
>Downlink Compressed Mode Method	C-DL		ENUMERATED (Puncturing, SF/2, Higher Layer Scheduling,)	Method for generating downlink compressed mode gap
>Uplink Compressed Mode Method	C-UL		ENUMERATED (SF/2, Higher Layer Scheduling,)	Method for generating uplink compressed mode gap.
>Downlink Frame Type	М		ENUMERATED (A, B,)	Defines if frame structure type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		INTEGER (030)	Delta in SIR target value to be set in the Node B during the frame containing the start of the first transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase). Unit: dB Range: 03 dB Step: 0.1 dB

>DeltaSIRafter1	M	INTEGER (030)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the first transmission gap in the transmission gap pattern. Unit: dB Range: 03 dB Step: 0.1 dB
>DeltaSIR2	0	INTEGER (030)	Delta in SIR target value to be set in the Node B during the frame containing the start of the second transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase). When omitted, DeltaSIR2 = DeltaSIR1. Unit: dB Range: 03 dB Step: 0.1 dB
>DeltaSIRafter2	0	INTEGER (030)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. When omitted, DeltaSIRafter2 = DeltaSIRafter1. Unit: dB Range: 03 dB Step: 0.1 dB

Condition	Explanation
UL	The IE shall be present if the UL/DL mode IE is set to "UL only" or
	"UL/DL".
DL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "DL only" or
	"UL/DL".

Range Bound	Explanation		
maxTGPS	Maximum number of transmission gap pattern sequences		

9.2.2.53B Transmission Gap Pattern Sequence Code Information

This IE indicates whether the alternative scrambling code shall used for the Downlink compressed mode method or not in the Transmission Gap Pattern Sequence. For details see [9].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Transmission Gap Pattern			ENUMERATED (Indicates whether the
Sequence Code Information			Code Change,	alternative scrambling code is
			No Code Change)	used for compressed mode
				method "SF/2".

9.2.2.54 UL/DL compressed mode selection

Void.

9.2.2.55 UL delta SIR

Void.

9.2.2.56 UL delta SIR after

Void.

9.2.2.57 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPCCH Slot Format			INTEGER (05,)	

9.2.2.58 UL SIR

Void.

9.2.2.59 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UL Scrambling Code Number	M		INTEGER (02 ²⁴ -1)	
UL Scrambling Code Length	M		ENUMERATED (
			Short,	
			Long)	

9.2.2.60 UL Capacity Credit

Void.

9.2.2.61 UL DPDCH Indicator For E-DCH Operation

The UL DPDCH Indicator For E-DCH Operation parameter indicates whether some UL DPCH parameters should be ignored or not in the message in which the *UL DPDCH Indicator For E-DCH Operation* IE was included.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPDCH Indicator For E-			ENUMERATED (
DCH Operation			UL-DPDCH present,	
			UL-DPDCH not	
			present)	

9.2.3 TDD specific Parameters

9.2.3.1 Block STTD Indicator

Void.

9.2.3.2 Burst Type

Void.

9.2.3.3 CCTrCH ID

The CCTrCH ID for dedicated and shared channels identifies unambiguously an uplink or downlink CCTrCH inside a Radio Link. For S-CCPCH, it identifies unambiguously a downlink CCTrCH within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER (015)	

9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see ref. [20]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER (0127,)	

9.2.3.4A Constant Value

The Constant Value is the power margin used by a UE to set the proper uplink power for a DCH, USCH, or a RACH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Constant Value			INTEGER (-1010,)	Unit: dB Range: -10 +10 dB Step: 1 dB.

9.2.3.4B DL Timeslot ISCP

The DL Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER (091)	According to mapping in ref. [5].

9.2.3.4C DCH TDD Information

The DCH TDD Information IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH TDD Information		1 <maxno ofDCHs></maxno 			_	
>Payload CRC Presence Indicator	M		9.2.1.49		_	
>UL FP Mode	M		9.2.1.66		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	М		9.2.1.60		-	
>DCH Specific Info		1 <maxno ofDCHs></maxno 			_	
>>DCH ID	М		9.2.1.20		-	
>>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the DCH is mapped	_	
>>CCTrCH ID	M		9.2.3.3	DL CCTrCH in which the DCH is mapped	_	
>>Transport Format Set	M		9.2.1.59	For UL	_	
>>Transport Format Set	М		9.2.1.59	For DL	-	
>>Allocation/Retention Priority	М		9.2.1.1A		_	
>>Frame Handling Priority	M		9.2.1.30		_	
>>QE-Selector	C- CoorDCH		9.2.1.50A		_	
>>Unidirectional DCH Indicator	0		9.2.1.68		YES	reject
>TNL QoS	0		9.2.1.58A		YES	ignore

Condition	Explanation
CoorDCH	The IE shall be present if this DCH is part of a set of coordinated
	DCHs (number of instances of the DCH Specific Info IE is greater
	than 1).

Range Bound	Explanation		
maxnoofDCHs	Maximum number of DCHs for one UE		

9.2.3.4D DCHs TDD To Modify

The $DCHs\ TDD\ To\ Modify\ IE$ provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCHs TDD To Modify		1 <maxno ofDCHs></maxno 			_	
>UL FP Mode	0		9.2.1.66		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		-	
>Transport Bearer Request Indicator	M		9.2.1.62A		_	
>DCH Specific Info		1 <maxno ofDCHs></maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>CCTrCH ID	0		9.2.3.3	UL CCTrCH in which the DCH is mapped.	_	
>>CCTrCH ID	0		9.2.3.3	DL CCTrCH in which the DCH is mapped	_	
>>Transport Format Set	0		9.2.1.59	For the UL.	_	
>>Transport Format Set	0		9.2.1.59	For the DL.	_	
>>Allocation/Retention Priority	0		9.2.1.1A		_	
>>Frame Handling Priority	0		9.2.1.30		_	
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation		
maxnoofDCHs	Maximum number of DCHs for one UE		

9.2.3.4E DL Timeslot Information

The DL Timeslot Information IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot Information		1 <maxno ofDLts></maxno 		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type	M		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	М		TDD DL Code Information 9.2.3.19B	

Range Bound	Explanation		
maxnoofDLts	Maximum number of Downlink time slots per Radio Link		

9.2.3.4F DL Time Slot ISCP Info

The DL Time Slot ISCP Info IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Time Slot ISCP Info		1 <maxno ofDLts></maxno 		
>Time Slot	М		9.2.3.23	
>DL Timeslot ISCP	M		9.2.3.4B	

Range Bound	Explanation
maxnoofDLts	Maximum number of Downlink time slots per Radio Link for 3.84Mcps
	TDD.

9.2.3.4G Cell Sync Burst Code

The Cell Sync Burst Code IE indicates which Code is used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Code			INTEGER (07,)	

9.2.3.4H Cell Sync Burst Code Shift

The Cell Sync Burst Code Shift IE indicates the number of code shifts used for a given Cell Sync Burst.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Code Shift			INTEGER (07)	

9.2.3.4I CSB Measurement ID

The Cell Sync Burst Measurement ID IE uniquely identifies any cell synchronisation burst measurement per Node B Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Measurement ID			INTEGER (065535)	

9.2.3.4J Cell Sync Burst Repetition Period

The *Cell Sync Burst Repetition Period* IE represents the number of consecutive Radio Frames after which the cell synchronisation burst transmission/measurement is repeated. This means that if the Time Slot K is assigned to the cell synchronisation burst transmission/measurements in the Radio Frame J, the cell synchronisation burst transmission/measurement is also in all the Radio Frames J+n*Repetition Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Repetition Period			INTEGER (04095)	

9.2.3.4K Cell Sync Burst SIR

Indicates the Signal to Interference Ratio of the cell synchronisation burst measurement according definition in [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst SIR			INTEGER (031)	According to mapping in [23]

9.2.3.4L Cell Sync Burst Timing

The *Cell Sync Burst Timing* IE defines the time of start (defined by the first detected path in time) of the cell synchronisation burst of a neighbouring cell see [5] for 3.84Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Cell Synch Burst Timing Value	М		INTEGER (01048575,)	
>Steady State Phase				
>>Cell Synch Burst Timing	M		INTEGER	
Value			(0255,)	

9.2.3.4La Cell Sync Burst Timing LCR

The *Cell Sync Burst Timing LCR* IE defines the time of start (defined by the first detected path in time) of the cell synchronisation burst of a neighbouring cell see [5] for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Cell Synch Burst Timing	M		INTEGER (0	
Value			524287,)	
>Steady State Phase				
>>Cell Synch Burst Timing	M		INTEGER	
Value			(0127,)	

9.2.3.4M Cell Sync Burst Timing Threshold

The *Cell Sync Burst Timing Threshold* IE defines the threshold that shall trigger a CELL SYNCHRONISATION REPORT message.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Sync Burst Timing Threshold			INTEGER (0254)	Unit: chip Range: 0 31.75 chips Step: 0.125 chip

9.2.3.4N CSB Transmission ID

The Cell Sync Burst Transmisson ID IE uniquely identifies any cell synchronisation burst transmission per Node B Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CSB Transmission ID			INTEGER (065535)	

9.2.3.40 DL Timeslot Information LCR

The DL Timeslot Information LCR IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information LCR		1 <ma xnoofD LtsLCR ></ma 			_	
>Time Slot LCR	M		9.2.3.24A		-	
>Midamble Shift LCR	M		9.2.3.7A		ı	
>TFCI Presence	M		9.2.1.57		_	
>DL Code Information	M		TDD DL Code Information LCR 9.2.3.19C		1	
>Initial DL Transmission Power	0		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	YES	ignore
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	YES	ignore

Range Bound	Explanation
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps
	TDD.

9.2.3.4P DL Time Slot ISCP Info LCR

The *DL Time Slot ISCP Info LCR* IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Time Slot ISCP Info LCR		1 <maxno ofDLtsLCR ></maxno 		
>Time Slot LCR	M		9.2.3.24A	
>DL Timeslot ISCP	M		9.2.3.4B	

Range Bound	Explanation
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps
	TDD.

9.2.3.5 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER (0239)	

9.2.3.5A DSCH TDD Information

The DSCH TDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH TDD Information		1 <max noofDS CHs></max 			_	
>DSCH ID	M		9.2.1.27		_	
>CCTrCH ID	М		9.2.3.3	DL CCTrCH in which the DSCH is mapped	_	
>Transport Format Set	М		9.2.1.59	For DSCH	_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>Frame Handling Priority	М		9.2.1.30		_	
>ToAWS	М		9.2.1.61		_	
>ToAWE	М		9.2.1.60		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Range Bound	Explanation		
MaxnoofDSCHs	Maximum number of DSCH for one UE		

9.2.3.5B DwPCH Power

DwPCH Power is the power that shall be used for transmitting the DwPCH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the DwPCH, the DwPCH power is the linear sum of the power that is used for transmitting the DwPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DwPCH Power			INTEGER	Unit: dBm
			(-150+400,)	Range: -15+40 dBm Step: 0.1 dB

9.2.3.5C Frame Adjustment Value

The Frame Adjustment Value IE represents the frame number correction within the initial synchronisation phase.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Adjustment Value			INTEGER (04095)	SFN _{new} =(SFN _{old} +Frame Adjustment Value) mod 4096

9.2.3.5D IPDL TDD Parameter

The IPDL TDD Parameter IE provides information about IPDL to be applied for 3.84Mcps TDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP SpacingTDD	M		ENUMERATED (30, 40, 50, 70, 100,)	See [21]
IP Start	M		INTEGER (04095)	See [21]
IP Slot	M		INTEGER (014)	See [21]
IP PCCPCH	M		ENUMERATED (See [21]

		Switch off 1 frame, Switch off 2 frames)	
Burst Mode parameters	0	9.2.1.5A	

9.2.3.5E Max FPACH Power

Max FPACH Power is the maximum power that shall be used for transmitting the FPACH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the FPACH, the Max FPACH Power is maximum of the linear sum of the power that is allowed for transmitting the FPACH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FPACH Power			INTEGER	Unit: dBm
			(-150+400,)	Range: -15+40 dBm
				Step: 0.1 dB

9.2.3.5F HS-DSCH TDD Information

The *HS-DSCH TDD Information* IE is used for initial addition of HS-DSCH information to a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flows Information	М		9.2.1.31IA	
UE Capabilities Information				
>HS-DSCH Physical Layer Category	М		9.2.1.31la	
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.38Ab	
TDD ACK NACK Power Offset	M		9.2.3.18F	

9.2.3.5G HS-DSCH TDD Information Response

The HS-DSCH TDD Information Response provides information for HS-DSCH MAC-d flows that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		0 <max noofMA CdFlow s></max 			-	,
>HS-DSCH MAC-d Flow ID	М	02	9.2.1.311		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		-	
> HS-DSCH Initial Capacity Allocation	0	_	9.2.1.31Ha		-	
HS-SCCH Specific Information Response		0 <max NoOfHS SCCHc odes></max 		Not applicable to 1.28 Mcps TDD	GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
>Midamble Shift And Burst Type	M		9.2.3.7		_	
>TDD Channelisation Code	М	4	9.2.3.19		_	
>HS-SICH Information		1			_	
>>HS SICH ID	M		9.2.3.5Gb		_	
>>Time Slot >>Midamble Shift And Burst Type	M		9.2.3.23 9.2.3.7		_	
>>TDD Channelisation Code	М		9.2.3.19		-	
HS-SCCH Specific Information Response LCR		0 <max NoOfHS SCCHc</max 		Not applicable to 3.84 Mcps TDD	GLOBAL	reject
		odes>				
>Time Slot LCR >Midamble Shift LCR	M		9.2.3.24A 9.2.3.7A		_	
>First TDD Channelisation Code	М		TDD Channelisatio n Code 9.2.3.19		-	
>Second TDD Channelisation Code	M		TDD Channelisatio n Code 9.2.3.19		-	
>HS-SICH Information LCR		1			_	
>>HS SICH ID	M		9.2.3.5Gb			
>>Time Slot LCR >>Midamble Shift LCR	M		9.2.3.24A 9.2.3.7A		_	
>>TDD Channelisation Code	М		9.2.3.19		_	
CHOICE HARQ Memory Partitioning	0				_	
>Implicit					_	
>>Number of Processes	M		INTEGER (18,)	For HARQ process IDs going from 0 to 'Number of Processes' – 1 the Total number of soft channel bits [33] is partitioned equally between all HARQ processes according to the rules in [18].	_	

IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
			Reference	Description		Criticality
>Explicit					_	
>>HARQ Memory		1 <max< th=""><th></th><th>The first instance of</th><th>_</th><th></th></max<>		The first instance of	_	
Partitioning		noofHA		the parameter		
Infomation		RQproc		corresponds to HARQ		
		esses>		process with identifier		
				0, the second		
				instance to HARQ		
				process with identifier		
				1, and so on.		
>>>Process	M		9.2.1.49D	See [18]	_	
Memory Size						

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxnoofHARQprocesses	Maximum number of HARQ processes for one UE

9.2.3.5GA HS-DSCH TDD Update Information

The *HS-DSCH TDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Indicator	0		9.2.1.31K	
TDD ACK NACK Power Offset	0		9.2.3.18F	

9.2.3.5Ga HS-SCCH ID

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SCCH ID			INTEGER (031)	

9.2.3.5Gb HS-SICH ID

The HS-SICH ID identifies unambiguously a HS-SICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SICH ID			INTEGER (031)	

9.2.3.5H IPDL TDD Parameters LCR

The IPDL TDD Parameters LCR IE provides information about IPDL to be applied for 1.28Mcps TDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP SpacingTDD	M		ENUMERATED (30, 40, 50, 70, 100,)	See [21]
IP Start	M		INTEGER (04095)	See [21]
IP_Sub	М		ENUMERATED (First, Second.	See [21]

		Both)	
Burst Mode Parameters	0	9.2.1.5A	

9.2.3.6 Max PRACH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max PRACH Midamble Shift			ENUMERATED (4, 8,)	

9.2.3.7 Midamble Shift And Burst Type

This information element indicates burst type and midamble allocation.

The 256 chip midamble supports 3 different time shifts, the 512 chips midamble may support 8 or even 16 time shifts.

Three different midamble allocation schemes exist:

Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	М		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	
>Type2				
>>Midamble Configuration Burst Type 2	М		INTEGER (3,6)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (05)	
>Type3				UL only
>>Midamble Configuration Burst Type 1 And 3	М		INTEGER (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	

9.2.3.7A Midamble Shift LCR

This information element indicates midamble allocation in 1.28Mcps TDD.

Three different midamble allocation schemes exist:

Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Midamble Allocation Mode	M		ENUMERATED (Default midamble, Common midamble, UE specific midamble,)	
Midamble Shift Long	C-UE		INTEGER (015)	
Midamble Configuration LCR	М		ENUMERATED (2, 4, 6, 8, 10, 12, 14, 16,)	As defined in [19]

	Condition	Explanation
UE		The IE shall be present if the Midamble Allocation Mode IE is set to
		"UE-specific midamble".

9.2.3.7Aa Notification Indicator Length

The Notification Indicator Length indicates the number of symbols for Notification Indication transmitted in one timeslot (see ref [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Notification Indicator Length			ENUMERATED	
			(2, 4, 8,)	

9.2.3.7B Number Of Cycles Per SFN Period

The *Number Of Cycles Per SFN Period* IE indicates the number of repetitions per SFN period where the same schedule shall apply.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Cycles Per SFN			ENUMERATED	
Period			(1, 2, 4, 8,,	
			16, 32, 64)	

9.2.3.7C Number Of Repetitions Per Cycle Period

The *Number Of Repetitions Per Cycle Period* IE indicates the number of Sync frames per Cycle Length where the [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD – Sync_DL Codes] shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Repetitions Per Cycle Period			INTEGER (210)	

9.2.3.7D Number Of Subcycles Per Cycle Period

The *Number Of Subcycles Per Cycle Period* IE indicates the number of subcycles within a Synchronisation Cycle. Within each subcycle, the same sequence of SYNC_DL Code transmissions and receptions is performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Subcycles Per Cycle Period			INTEGER (116,)	

9.2.3.8 Paging Indicator Length

The Paging Indicator Length indicates the number of symbols for Page Indication transmitted in one timeslot (see ref [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging Indicator Length			ENUMERATED (2, 4, 8,)	

9.2.3.9 PCCPCH Power

The Primary CCPCH power is the power that shall be used for transmitting the P CCPCH in a cell. The P CCPCH power is the reference power in a TDD-cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CCPCH, the Primary CCPCH power is the linear sum of the power that is used for transmitting the Primary CCPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCCPCH Power			INTEGER (-15+40,)	Unit: dBm Range: -15+40 dBm Step: 0.1 dB

9.2.3.10 PDSCH ID

The PDSCH ID identifies unambiguously a PDSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH ID			INTEGER (0255)	

9.2.3.11 PDSCH Set ID

The PDSCH Set Id identifies unambiguously a PDSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH Set ID			INTEGER (0255)	See ref. [6]

9.2.3.11A Primary CCPCH RSCP

Received Signal Code Power is the received power on PCCPCH of the target cell after despreading. The reference point for the RSCP is the antenna connector at the UE, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP			INTEGER (091)	According to mapping of the non-negative values in ref. [23].

9.2.3.11B Primary CCPCH RSCP Delta

Primary CCPCH RSCP Delta is the offset used to report the negative reporting range of P-CCPCH RSCP as per [23].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP Delta			INTEGER(-51,)	If present, the actual value of Primary CCPCH RSCP = Primary CCPCH RSCP Delta

9.2.3.12 PUSCH ID

The PUSCH ID identifies unambiguously a PUSCH inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH ID			INTEGER (0255)	

9.2.3.13 PUSCH Set ID

The PUSCH Set ID identifies unambiguously a PUSCH Set inside a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PUSCH Set ID			INTEGER (0255)	See ref. [6]

9.2.3.14 PRACH Midamble

The PRACH Midamble indicates if only the Basic Midamble Sequence or also the time-inverted Midamble Sequence is used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PRACH Midamble			ENUMERATED (Inverted, Direct,	
)	

9.2.3.14A Reference Clock Availability

The *Reference Clock Availability* IE is used to indicate the presence and operating of a Reference Clock connected to a TDD cell for cell synchronisation purpose.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Clock Availability			ENUMERATED (
			Available,	
			Not Available)	

9.2.3.14B Reference SFN Offset

The Reference SFN Offset IE indicates the number of frames the reference SFN shall be shifted compared to the SFN derived from the synchronisation port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference SFN Offset			INTEGER (0255)	

9.2.3.15 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Length			INTEGER (163)	

9.2.3.16 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the Radio Frame J, it is assigned to the same physical channel also in all the Radio Frames J+n*Repetition Period (where n is an integer) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period			ENUMERATED	
			(1, 2, 4, 8, 16, 32,	
			64,)	

9.2.3.17 SCH Time Slot

The *SCH Time Slot* IE represents the first time slot (k) of a pair of time slots inside a Radio Frame that shall be assigned to the Physical Channel SCH. The *SCH Time Slot* IE is only applicable if the value of *Sync Case* IE is Case 2 since in this case the SCH is allocated in TS#k and TS#k+8.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCH Time Slot			INTEGER (06)	

9.2.3.18 Sync Case

The SCH and PCCPCH are mapped on one or two downlink slots per frame. There are two cases of SCH and PCCPCH allocation as follows:

Case 1) SCH and PCCPCH allocated in a single TS#k

Case 2) SCH allocated in two TS: TS#k and TS#k+8 PCCPCH allocated in TS#k

[1.28Mcps TDD - There is no Sync Case indication needed for 1.28Mcps TDD. If the *Sync Case* IE must be included in a message from CRNC to Node B used for 1.28Mcps TDD, the CRNC should indicate Sync Case 1 and the Node B shall ignore it.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			INTEGER (12,)	

9.2.3.18A Special Burst Scheduling

The number of frames between special burst transmissions during DTX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Special Burst Scheduling			INTEGER (1256)	Number of frames between special burst transmission during DTX

9.2.3.18B SYNC DL Code ID

The SYNC DL Code ID identifies the SYNC DL Code which used by DwPCH.

II	E/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SYNC_D	DL Code ID			INTEGER (132,)	

9.2.3.18C Sync Frame Number

The *Sync Frame Number* IE indicates the number of the Sync frame within a Synchronisation Cycle or Subcycle, respectively, where the cell synchronisation bursts shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Frame Number			INTEGER (110)	

9.2.3.18D Synchronisation Report Characteristics

The *Synchronisation Report Characteristics* IE defines how the reporting on measured [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD – Sync_DL Codes] shall be performed

Different methods shall apply for the measured [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD – Sync_DL Codes] reports. [3.84Mcps TDD - In the frequency acquisition phase the measurement report shall be sent when the frequency locking is completed.] In the initial phase and for the measurement on late-entrant cells an immediate report after the measured frame is expected.

In the steady-state phase measurement reports may be given after every measured frame, after every SFN period, after every cycle length or only when the requested threshold is exceeded.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Report Characteristics Type	M		ENUMERATED (Frame related, SFN period related, Cycle length related, Threshold exceeding, Frequency Acquisition completed,	
)	

Threshold Exceeding	C- Threshold			Applies only to the Steady State Phase
	Exceeding			
>Cell Sync Burst Threshold Information		0 <maxno ofCellSync</maxno 		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps
		Bursts>	0 5 11 1	TDD.
>>Sync Frame Number To Receive	М		Sync Frame Number 9.2.3.18C	
>>Cell Sync Burst		1 <maxno< td=""><td></td><td></td></maxno<>		
Information		ofreceptio nsperSync Frame>		
>>>Cell Sync Burst Code	М		9.2.3.4G	
>>>Cell Sync Burst Code Shift	М		9.2.3.4H	
>>>Cell Sync Burst Arrival Time	0		Cell Sync Burst Timing 9.2.3.4L	
>>>Cell Sync Burst Timing Threshold	0		9.2.3.4M	
>SYNC_DL Code Threshold Information LCR		0 <maxno ofSyncFra mesLCR></maxno 		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C	
>>SYNC_DL Code Information LCR		1 <maxno ofreceptio nsperSync FrameLCR ></maxno 		
>>>SYNC_DL Code ID	М		9.2.3.18B	
>>>SYNC_DL Code ID Arrival Time	0		Cell Sync Burst Timing LCR 9.2.3.4La	
>>>SYNC_DL Code ID Timing Threshold	0		Cell Sync Burst Timing Threshold 9.2.3.4M	

Range Bound	Explanation
maxnoofCellSyncBursts	Maximum number of cell synchronisation burst per cycle for 3.84Mcps TDD
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of SYNC Frames per repetition period for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD

9.2.3.18E Synchronisation Report Type

The *Synchronisationt Report Type* IE represents the individual types of synchronisation reports that shall apply within the individual synchronisation phases. (see [17]).

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Synchronisation Report Type			ENUMERATED (
			Initial Phase,	
			Steady-State Phase,	
			Late-Entrant Cell,	
			Frequency	
			Acquisition,	
)	

9.2.3.18F TDD ACK NACK Power Offset

The *TDD ACK NACK Power Offset* IE indicates Power offset used in the UL in the HS-SICH between transmissions carrying positive and negative acknowledgements as per [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TDD ACK NACK Power Offset			INTEGER (-78,)	Unit: dB
				Range: -7+8 dB Step: 1 dB

9.2.3.19 TDD Channelisation Code

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			ENUMERATED ((1/1), (2/1), (2/2), (4/1), (4/4), (8/1), (8/8), (16/1), (16/16),)	

9.2.3.19a TDD Channelisation Code LCR

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 1.28Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16 and there is a choice between QPSK and 8PSK modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			9.2.3.19	
Modulation			ENUMERATED (QPSK, 8PSK,)	Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD

9.2.3.19A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The *Offset Type* IE = "No Initial Offset" is used when a starting offset is not required and the TDD Physical channel offset for each DPCH in the CCTrCH shall be directly determined from the TDD DPCH Offset. The *Offset Type* IE = "Initial Offset" is used when a starting offset is required. The TDD DPCH Offset shall map to the CFN and the TDD Physical Channel Offet for each DPCH in this CCTrCH shall calculated by TDD DPCH Offset *mod* Repetition period, see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type			11010101100	
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (063)	

9.2.3.19B TDD DL Code Information

The TDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information		1 <maxno ofDPCHs></maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	M		9.2.3.19	

Range Bound	Explanation		
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH		

9.2.3.19C TDD DL Code Information LCR

The TDD DL Code Information LCR IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information LCR		1 <maxno ofDPCHsL CR></maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	М		9.2.3.19a	
>TDD DL DPCH Time Slot Format LCR	М		9.2.3.19D	

Range Bound	Explanation		
maxnoofDPCHsLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD		

9.2.3.19D TDD DL DPCH Time Slot Format LCR

TDD DL DPCH Time Slot Format LCR indicates the time slot formats used in DL DPCH for 1.28Mcps TDD (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Modulation	M			
>QPSK				
>>QPSK TDD DL DPCH Time Slot Format LCR	М		INTEGER (024,)	
>8PSK				
>>8PSK TDD DL DPCH Time Slot Format LCR	M		INTEGER (024,)	

9.2.3.20 TDD Physical Channel Offset

The Offset represents the phase information for the allocation of a physical channel. (SFN mod Repetition Period = Offset) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel Offset			INTEGER (063)	

9.2.3.21 TDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERATED (1, 2, 3,)	Unit: dB

9.2.3.21a TDD TPC UL Step Size

This parameter indicates step size for the UL power adjustment (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Uplink Step Size			ENUMERATED (1, 2, 3,)	Unit: dB

9.2.3.21A TDD UL Code Information

The TDD UL Code Information IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information		1 <maxno ofDPCHs></maxno 		
>DPCH ID	М		9.2.3.5	
>TDD Channelisation Code	М		9.2.3.19	

Range Bound	Explanation		
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH		

9.2.3.21B TDD UL Code Information LCR

The TDD UL Code Information LCR IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information LCR		1 <maxno ofDPCHsL CR></maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	М		9.2.3.19a	
>TDD UL DPCH Time Slot Format LCR	М		9.2.3.21C	

Range Bound	Explanation
maxnoofDPCHsLCR	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD

9.2.3.21C TDD UL DPCH Time Slot Format LCR

TDD UL DPCH Time Slot Format LCR indicates the time slot formats used in UL DPCH for 1.28Mcps TDD (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Modulation	M			
>QPSK				
>>QPSK TDD UL DPCH Time Slot Format LCR	М		INTEGER (069,)	
>8PSK				
>>8PSK TDD UL DPCH Time Slot Format LCR	M		INTEGER (024,)	

9.2.3.22 TFCI Coding

The TFCI Coding describes the way how the TFCI bits are coded. By default 1 TFCI bit is coded with 4 bits, 2 TFCI bits are coded with 8 bits, 3-5 TFCI bits are coded with 16 bits and 6-10 TFCI bits are coded with 32 bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Coding			ENUMERATED	
			(4, 8, 16, 32,)	

9.2.3.22a Timing Adjustment Value

The *Timing Adjustment Value* IE indicates the timing correction within a Frame for 3.84Mcps TDD. Type 1 is used for the initial phase of Node B synchronisation. Type 2 is used for the steady-state phase of Node B synchronisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Timing Adjustment Value	М		INTEGER (01048575,)	
>Steady State Phase				
>>Timing Adjustment Value	М		INTEGER (0255,)	

9.2.3.22b Timing Adjustment Value LCR

The *Timing Adjustment Value LCR* IE indicates the timing correction within a Frame for 1.28Mcps TDD. Type 1 is used for the initial phase of Node B synchronisation. Type 2 is used for the steady-state phase of Node B synchronisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Timing Adjustment	M		INTEGER (0	
Value			524287,)	
>Steady State Phase				
>>Timing Adjustment	М		INTEGER	
Value			(0127,)	

9.2.3.22A Timing Advance Applied

Defines the need for Rx Timing Deviation measurement results to be reported in a particular cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timing Advance Applied			ENUMERATED (Yes,	
			No)	

9.2.3.23 Time Slot

The Time Slot represents the minimum time interval inside a Radio Frame that can be assigned to a Physical Channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot			INTEGER (014)	

9.2.3.24 Time Slot Direction

This parameter indicates whether the TS in the cell is used in Uplink or Downlink direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Direction			ENUMERATED (
			UL,	
			DL,	
)	

9.2.3.24A Time Slot LCR

The Time Slot LCR is the number of the traffic time slot within a 5 ms subframe of LCR TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot LCR			INTEGER (06)	

9.2.3.25 Time Slot Status

This parameter indicates whether the TS in the cell is active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Status			ENUMERATED (
			Active,	
			Not Active,	
)	

9.2.3.26 Transmission Diversity Applied

Defines if Transmission Diversity on physical channels that may use closed loop transmit diversity is to be applied in a cell (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Diversity Applied			BOOLEAN	True: Transmission Diversity shall be applied in this Cell.
				False: Transmission Diversity shall not be applied in this Cell.

9.2.3.26A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the Node B, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER (0127)	According to mapping in [23].

9.2.3.26B UL PhysCH SF Variation

Indicates whether variation of SF in UL is supported by Radio Link or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL PhysCH SF Variation			ENUMERATED (SF_Variation_supported, SF_Variation_NOT_ supported)	

9.2.3.26C UL Timeslot Information

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot Information		1 <maxno ofults=""></maxno>		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type	М		9.2.3.7	
>TFCI Presence	M		9.2.1.57	
>UL Code Information	M		TDD UL Code Information 9.2.3.21A	

Range Bound	Explanation			
maxnoofULts	Maximum number of Uplink time slots per Radio Link			

9.2.3.26D UL Time Slot ISCP Info

The *UL Time Slot ISCP Info* IE provides information for UL Interfernce level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Time Slot ISCP Info		1 <maxno ofULts></maxno 		
>Time Slot	M		9.2.3.23	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation		
maxnoofULts	Maximum number of Uplink time slots per Radio Link		

9.2.3.26E UL Timeslot Information LCR

The UL Timeslot Information IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot Information LCR		1 <maxno ofULtsLCR ></maxno 		
>Time Slot LCR	М		9.2.3.24A	
>Midamble Shift LCR	М		9.2.3.7A	
>TFCI Presence	М		9.2.1.57	
>UL Code Information	M		TDD UL Code Information LCR 9.2.3.21B	

Range Bound	Explanation
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

9.2.3.26F UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interfernce level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Time Slot ISCP Info LCR		1 <maxno ofULtsLCR ></maxno 		
>Time Slot LCR	М		9.2.3.24A	
>UL Timeslot ISCP	М		9.2.3.26A	

Range Bound	Explanation		
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps		
	TDD		

9.2.3.26G Uplink Synchronisation Frequency

The UL Synchronisation Frequency IE specifies the frequency of the adjustment of the uplink transmission timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Synchronisation			INTEGER (18)	Unit: subframe
Frequency				Step: 1

9.2.3.26H Uplink Synchronisation Step Size

The *UL Synchronisation Step Size* IE specifies the step size to be used for the adjustment of the uplink transmission timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Synchronisation Step Size			INTEGER (18)	Unit: 1/8 chip Step: 1.

9.2.3.27 USCH ID

The USCH ID uniquely identifies a USCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH ID			INTEGER (0255)	

9.2.3.28 USCH Information

The USCH Information IE provides information for USCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
USCH Information		1 <max noofUS CHs></max 			_	
>USCH ID	M		9.2.3.27		-	
>CCTrCH ID	М		9.2.3.3	UL CCTrCH in which the USCH is mapped	_	
>Transport Format Set	М		9.2.1.59	For USCH	_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation		
maxnoofUSCHs	Maximum number of USCHs for one UE		

9.2.3.29 USCH Information Response

The USCH Information Response IE provides information for USCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH Information Response		1 <maxno ofUSCHs></maxno 		
>USCH ID	M		9.2.3.27	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	

Range Bound	Explanation		
maxnoofUSCHs	Maximum number of USCHs for one UE		

9.2.3.30 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to beacon channels (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCTD Indicator			ENUMERATED (active, inactive)	

9.3 Message and Information Element Abstract Syntax (with ASN.1)

9.3.0 General

Subclause 9.3 presents the Abstract Syntax of NBAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclauses 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of NBAP messages. NBAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a NBAP message according to the PDU definitions module and with the following additional rules (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list where the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

If a NBAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

9.3.1 Usage of Private Message mechanism for non-standard use

The private message mechanism for non-standard use may be used.

- For special operator- (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multi-vendor inter-operability.
- By vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation.

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

9.3.2 Elementary Procedure Definitions

```
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Descriptions (0) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
__ *******************
-- IE parameter types from other modules.
__ ********************
IMPORTS
    Criticality,
    ProcedureID,
   MessageDiscriminator,
    TransactionID
FROM NBAP-CommonDataTypes
    CommonTransportChannelSetupRequestFDD,
    CommonTransportChannelSetupRequestTDD,
    CommonTransportChannelSetupResponse,
    CommonTransportChannelSetupFailure,
    CommonTransportChannelReconfigurationRequestFDD,
    CommonTransportChannelReconfigurationRequestTDD,
    CommonTransportChannelReconfigurationResponse,
    CommonTransportChannelReconfigurationFailure,
    CommonTransportChannelDeletionRequest,
    CommonTransportChannelDeletionResponse,
    BlockResourceRequest,
    BlockResourceResponse,
    BlockResourceFailure,
    UnblockResourceIndication,
    AuditFailure,
    AuditRequiredIndication,
    AuditRequest,
    AuditResponse,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementInitiationFailure,
    CommonMeasurementReport,
    CommonMeasurementTerminationRequest,
    CommonMeasurementFailureIndication,
    CellSetupRequestFDD,
    CellSetupRequestTDD,
    CellSetupResponse,
    CellSetupFailure,
    CellReconfigurationRequestFDD,
    CellReconfigurationRequestTDD,
    CellReconfigurationResponse,
    CellReconfigurationFailure,
    CellDeletionRequest,
    CellDeletionResponse,
```

```
InformationExchangeInitiationRequest,
InformationExchangeInitiationResponse,
InformationExchangeInitiationFailure,
InformationReport,
InformationExchangeTerminationRequest,
InformationExchangeFailureIndication,
BearerRearrangementIndication,
ResourceStatusIndication,
SystemInformationUpdateRequest,
SystemInformationUpdateResponse,
SystemInformationUpdateFailure,
ResetRequest,
ResetResponse,
RadioLinkActivationCommandFDD.
RadioLinkActivationCommandTDD,
RadioLinkPreemptionRequiredIndication,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkAdditionFailureFDD,
RadioLinkAdditionFailureTDD,
RadioLinkParameterUpdateIndicationFDD,
RadioLinkParameterUpdateIndicationTDD,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReady,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponse,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
DL-PowerControlRequest,
DL-PowerTimeslotControlRequest,
DedicatedMeasurementInitiationRequest,
DedicatedMeasurementInitiationResponse,
DedicatedMeasurementInitiationFailure,
DedicatedMeasurementReport,
DedicatedMeasurementTerminationRequest,
DedicatedMeasurementFailureIndication.
RadioLinkFailureIndication,
RadioLinkRestoreIndication,
CompressedModeCommand,
ErrorIndication,
PrivateMessage,
```

```
PhysicalSharedChannelReconfigurationRequestTDD,
    PhysicalSharedChannelReconfigurationRequestFDD,
    PhysicalSharedChannelReconfigurationResponse,
    PhysicalSharedChannelReconfigurationFailure,
    CellSynchronisationInitiationRequestTDD,
    CellSynchronisationInitiationResponseTDD,
    CellSynchronisationInitiationFailureTDD,
    CellSynchronisationReconfigurationRequestTDD.
    CellSynchronisationReconfigurationResponseTDD,
    CellSynchronisationReconfigurationFailureTDD,
    CellSynchronisationAdjustmentRequestTDD,
    CellSynchronisationAdjustmentResponseTDD,
    CellSynchronisationAdjustmentFailureTDD,
    CellSynchronisationReportTDD,
    CellSynchronisationTerminationRequestTDD,
    CellSynchronisationFailureIndicationTDD,
    MBMSNotificationUpdateCommand
FROM NBAP-PDU-Contents
    id-audit,
    id-auditRequired,
    id-blockResource,
    id-cellDeletion,
    id-cellReconfiguration,
    id-cellSetup,
    id-cellSynchronisationInitiation,
    id-cellSynchronisationReconfiguration,
    id-cellSynchronisationReporting,
    id-cellSynchronisationTermination,
    id-cellSynchronisationFailure,
    id-commonMeasurementFailure,
    id-commonMeasurementInitiation,
    id-commonMeasurementReport,
    id-commonMeasurementTermination,
    id-commonTransportChannelDelete,
    id-commonTransportChannelReconfigure,
    id-commonTransportChannelSetup,
    id-compressedModeCommand,
    id-dedicatedMeasurementFailure,
    id-dedicatedMeasurementInitiation,
    id-dedicatedMeasurementReport,
    id-dedicatedMeasurementTermination.
    id-downlinkPowerControl.
    id-downlinkPowerTimeslotControl,
    id-errorIndicationForDedicated,
    id-errorIndicationForCommon,
    id-informationExchangeFailure,
    id-informationExchangeInitiation,
    id-informationReporting,
    id-informationExchangeTermination,
    id-BearerRearrangement,
    id-mBMSNotificationUpdate,
    id-physicalSharedChannelReconfiguration,
    id-privateMessageForDedicated,
```

```
id-privateMessageForCommon,
   id-radioLinkActivation.
   id-radioLinkAddition.
   id-radioLinkDeletion,
   id-radioLinkFailure,
   id-radioLinkParameterUpdate,
   id-radioLinkPreemption,
   id-radioLinkRestoration,
   id-radioLinkSetup,
   id-reset.
   id-resourceStatusIndication,
   id-cellSynchronisationAdjustment,
   id-synchronisedRadioLinkReconfigurationCancellation,
   id-synchronisedRadioLinkReconfigurationCommit,
   id-synchronisedRadioLinkReconfigurationPreparation,
   id-systemInformationUpdate,
   id-unblockResource,
    id-unSynchronisedRadioLinkReconfiguration
FROM NBAP-Constants;
     ****************
-- Interface Elementary Procedure Class
  ******************
NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
   &InitiatingMessage
   &SuccessfulOutcome
                                    OPTIONAL,
    &UnsuccessfulOutcome
                                    OPTIONAL,
    &Outcome
                                    OPTIONAL,
   &messageDiscriminator
                                    MessageDiscriminator,
   &procedureID
                                     ProcedureID
                                                   UNIQUE,
   &criticality
                                    Criticality
                                                   DEFAULT ignore
WITH SYNTAX {
    INITIATING MESSAGE
                                     &InitiatingMessage
                                     &SuccessfulOutcome]
    [SUCCESSFUL OUTCOME
    [UNSUCCESSFUL OUTCOME
                                     &UnsuccessfulOutcome]
                                     &Outcome]
    [OUTCOME
   MESSAGE DISCRIMINATOR
                                     &messageDiscriminator
   PROCEDURE ID
                                     &procedureID
    [CRITICALITY
                                    &criticality]
     ****************
-- Interface PDU Definition
NBAP-PDU ::= CHOICE {
   initiatingMessage
                          InitiatingMessage,
```

```
succesfulOutcome
                           SuccessfulOutcome,
    unsuccesfulOut.come
                           UnsuccessfulOut.come.
    out.come
                           Out.come.
InitiatingMessage ::= SEQUENCE
   procedureID
                           NBAP-ELEMENTARY-PROCEDURE.&procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
   criticality
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
                           NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   messageDiscriminator
    transactionID
                           TransactionID,
                           NBAP-ELEMENTARY-PROCEDURE.&InitiatingMessage({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
SuccessfulOutcome ::= SEOUENCE
   procedureID
                           NBAP-ELEMENTARY-PROCEDURE.&procedureID
                                                                  ({NBAP-ELEMENTARY-PROCEDURES}),
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality
                           NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   messageDiscriminator
    transactionID
                           TransactionID,
    value
                           NBAP-ELEMENTARY-PROCEDURE. &SuccessfulOutcome({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
UnsuccessfulOutcome ::= SEQUENCE {
   procedureID
                           NBAP-ELEMENTARY-PROCEDURE.&procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality
   messageDiscriminator
                           NBAP-ELEMENTARY-PROCEDURE. & messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID
                           TransactionID,
    value
                           NBAP-ELEMENTARY-PROCEDURE. &UnsuccessfulOutcome({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
Outcome ::= SEOUENCE {
                           NBAP-ELEMENTARY-PROCEDURE.&procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
   procedureID
   criticality
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
                           NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   messageDiscriminator
    transactionID
                           TransactionID,
                           NBAP-ELEMENTARY-PROCEDURE.&Outcome ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
      Interface Elementary Procedure List
NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
   NBAP-ELEMENTARY-PROCEDURES-CLASS-1
   NBAP-ELEMENTARY-PROCEDURES-CLASS-2
NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::=
   cellSetupFDD
    cellSetupTDD
    cellReconfigurationFDD
```

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```
cellReconfigurationTDD
    cellDeletion
    commonTransportChannelSetupFDD
    commonTransportChannelSetupTDD
    commonTransportChannelReconfigureFDD
    commonTransportChannelReconfigureTDD
    commonTransportChannelDelete
    audit
    blockResource
    radioLinkSetupFDD
    radioLinkSetupTDD
    systemInformationUpdate
    commonMeasurementInitiation
    radioLinkAdditionFDD
    radioLinkAdditionTDD
    radioLinkDeletion
    reset
    synchronisedRadioLinkReconfigurationPreparationFDD
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    dedicatedMeasurementInitiation
    physicalSharedChannelReconfigurationTDD
    . . . ,
    informationExchangeInitiation
    cellSynchronisationInitiationTDD
    cellSynchronisationReconfigurationTDD
    cellSynchronisationAdjustmentTDD
    physicalSharedChannelReconfigurationFDD
NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::= {
    resourceStatusIndication
    auditRequired
    commonMeasurementReport
    commonMeasurementTermination
    commonMeasurementFailure
    synchronisedRadioLinkReconfigurationCommit
    synchronisedRadioLinkReconfigurationCancellation
    radioLinkFailure
    radioLinkPreemption
    radioLinkRestoration
    {\tt dedicatedMeasurementReport}
    dedicatedMeasurementTermination
    dedicatedMeasurementFailure
    downlinkPowerControlFDD
    downlinkPowerTimeslotControl
    compressedModeCommand
    unblockResource
    errorIndicationForDedicated
    errorIndicationForCommon
    privateMessageForDedicated
    privateMessageForCommon
    . . . ,
```

```
informationReporting
    informationExchangeTermination
    informationExchangeFailure
    cellSynchronisationReportingTDD
    cellSynchronisationTerminationTDD
    cellSynchronisationFailureTDD
    bearerRearrangement
    radioLinkActivationFDD
    radioLinkActivationTDD
    radioLinkParameterUpdateFDD
    radioLinkParameterUpdateTDD
    mBMSNotificationUpdate
     ****************
  Interface Elementary Procedures
-- Class 1
-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                           CellSetupRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                           CellSetupResponse
                           CellSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                           common
                           { procedureCode id-cellSetup, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                           reject
-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                           CellSetupRequestTDD
    INITIATING MESSAGE
                           CellSetupResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                           CellSetupFailure
    MESSAGE DISCRIMINATOR
                           { procedureCode id-cellSetup, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                           reject
-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           CellReconfigurationRequestFDD
                           CellReconfigurationResponse
    SUCCESSFUL OUTCOME
                           CellReconfigurationFailure
    UNSUCCESSFUL OUTCOME
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                           { procedureCode id-cellReconfiguration, ddMode fdd
    CRITICALITY
                           reject
-- *** CellReconfiguration(TDD) ***
cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
```

```
CellReconfigurationRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CellReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            CellReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-cellReconfiguration, ddMode tdd
    CRITICALITY
                            reject
-- *** CellDeletion ***
cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellDeletionRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CellDeletionResponse
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-cellDeletion, ddMode common }
    CRITICALITY
                            reject
-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            {\tt CommonTransportChannelSetupRequestFDD}
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonTransportChannelSetupResponse
                            CommonTransportChannelSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-commonTransportChannelSetup, ddMode fdd }
    CRITICALITY
                            reject
-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonTransportChannelSetupRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonTransportChannelSetupResponse
                            CommonTransportChannelSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelSetup, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    CRITICALITY
                            reject
-- *** CommonTransportChannelReconfigure (TDD) ***
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonTransportChannelReconfigurationRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
    PROCEDURE ID
```

```
CRITICALITY
                            reject
-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelDeletionRequest
    SUCCESSFUL OUTCOME
                            CommonTransportChannelDeletionResponse
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-commonTransportChannelDelete, ddMode common }
    CRITICALITY
                            reject
-- *** Audit ***
audit NBAP-ELEMENTARY-PROCEDURE ::= {
                            AuditRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            AuditResponse
    UNSUCCESSFUL OUTCOME
                            AuditFailure
                            common
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-audit, ddMode common }
    CRITICALITY
                            reject
-- *** BlockResourceRequest ***
blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            BlockResourceRequest
    SUCCESSFUL OUTCOME
                            BlockResourceResponse
                            BlockResourceFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-blockResource, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** RadioLinkSetup (FDD) ***
radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkSetupRequestFDD
    SUCCESSFUL OUTCOME
                            RadioLinkSetupResponseFDD
    UNSUCCESSFUL OUTCOME
                            RadioLinkSetupFailureFDD
    MESSAGE DISCRIMINATOR
                            { procedureCode id-radioLinkSetup, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** RadioLinkSetup (TDD) ***
radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkSetupRequestTDD
    SUCCESSFUL OUTCOME
                            RadioLinkSetupResponseTDD
    UNSUCCESSFUL OUTCOME
                            RadioLinkSetupFailureTDD
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkSetup, ddMode tdd }
    CRITICALITY
                            reject
-- *** SystemInformationUpdate ***
systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
```

```
SystemInformationUpdateRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            SystemInformationUpdateResponse
    UNSUCCESSFUL OUTCOME
                            SystemInformationUpdateFailure
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-systemInformationUpdate, ddMode common }
    CRITICALITY
                            reject
-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
                            ResetRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            ResetResponse
                            common
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-reset, ddMode common }
                            reject
    CRITICALITY
-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            CommonMeasurementInitiationRequest
    SUCCESSFUL OUTCOME
                            CommonMeasurementInitiationResponse
                            CommonMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-commonMeasurementInitiation, ddMode common }
    CRITICALITY
-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkAdditionRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkAdditionResponseFDD
                            RadioLinkAdditionFailureFDD
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkAddition, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkAdditionRequestTDD
                            RadioLinkAdditionResponseTDD
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            RadioLinkAdditionFailureTDD
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkAddition, ddMode tdd }
    CRITICALITY
                            reject
-- *** RadioLinkDeletion
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME
                            RadioLinkDeletionResponse
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY
                            reject
```

```
-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationPrepareFDD
                            RadioLinkReconfigurationReady
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    CRITICALITY
                            reject
-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkReconfigurationPrepareTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationReady
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                            dedicated
    MESSAGE DISCRIMINATOR
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkReconfigurationRequestFDD
    INITIATING MESSAGE
                            RadioLinkReconfigurationResponse
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationRequestTDD
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
                            DedicatedMeasurementInitiationRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            DedicatedMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME
                            DedicatedMeasurementInitiationFailure
    MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    CRITICALITY
                            reject
-- *** PhysicalSharedChannelReconfiguration (FDD) ***
physicalSharedChannelReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE PhysicalSharedChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME PhysicalSharedChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            PhysicalSharedChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                        { procedureCode id-physicalSharedChannelReconfiguration, ddMode fdd }
    CRITICALITY
                        reject
-- *** PhysicalSharedChannelReconfiguration (TDD) ***
physicalSharedChannelReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE PhysicalSharedChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME PhysicalSharedChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME
                            PhysicalSharedChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            common
                        { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                        reject
-- *** InformationExchangeInitiation ***
informationExchangeInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeInitiationRequest
                            InformationExchangeInitiationResponse
    SUCCESSFUL OUTCOME
                            InformationExchangeInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationExchangeInitiation, ddMode common }
    CRITICALITY
                            reject
-- *** CellSynchronisationInitiation (TDD only) ***
cellSynchronisationInitiationTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE CellSynchronisationInitiationRequestTDD
    SUCCESSFUL OUTCOME CellSynchronisationInitiationResponseTDD
    UNSUCCESSFUL OUTCOME
                            CellSynchronisationInitiationFailureTDD
    MESSAGE DISCRIMINATOR
                        { procedureCode id-cellSynchronisationInitiation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                        reject
-- *** CellSynchronisationReconfiguration (TDD only) ***
cellSynchronisationReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CellSynchronisationReconfigurationRequestTDD
    SUCCESSFUL OUTCOME CellSynchronisationReconfigurationResponseTDD
                            {\tt CellSynchronisationReconfigurationFailureTDD}
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                        { procedureCode id-cellSynchronisationReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                        reject
-- *** CellSynchronisationAdjustment (TDD only) ***
cellSynchronisationAdjustmentTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE CellSynchronisationAdjustmentRequestTDD
    SUCCESSFUL OUTCOME CellSynchronisationAdjustmentResponseTDD
                            CellSynchronisationAdjustmentFailureTDD
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
```

```
{ procedureCode id-cellSynchronisationAdjustment, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
-- Class 2
-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResourceStatusIndication
    MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-resourceStatusIndication, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** AuditRequired ***
auditRequired NBAP-ELEMENTARY-PROCEDURE ::= {
                            AuditRequiredIndication
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-auditRequired, ddMode common }
    CRITICALITY
                            ignore
-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementReport
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonMeasurementReport, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementTerminationRequest
   MESSAGE DISCRIMINATOR
                            { procedureCode id-commonMeasurementTermination, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CommonMeasurementFailure ***
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementFailureIndication
   MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-commonMeasurementFailure, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** SynchronisedRadioLinkReconfigurationCommit ***
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationCommit
   MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
```

```
-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationCancel
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
                            ignore
    CRITICALITY
-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkFailureIndication
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkFailure, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** RadioLinkPreemption ***
radioLinkPreemption NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkPreemptionRequiredIndication
    MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID
                        { procedureCode id-radioLinkPreemption, ddMode common }
    CRITICALITY
                    ignore
-- *** RadioLinkRestoration ***
radioLinkRestoration NBAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkRestoreIndication
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY
-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DedicatedMeasurementReport
   MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementReport, ddMode common }
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
                            DedicatedMeasurementTerminationRequest
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            DedicatedMeasurementFailureIndication
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY
                            ignore
```

```
-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DL-PowerControlRequest
                           dedicated
   MESSAGE DISCRIMINATOR
                            { procedureCode id-downlinkPowerControl, ddMode fdd }
   PROCEDURE ID
    CRITICALITY
                            ignore
-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DL-PowerTimeslotControlRequest
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CompressedModeCommand
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-compressedModeCommand, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
                            UnblockResourceIndication
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-unblockResource, ddMode common }
    CRITICALITY
-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ErrorIndication
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-errorIndicationForDedicated, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** ErrorIndication for Common procedures ***
errorIndicationForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ErrorIndication
   MESSAGE DISCRIMINATOR common
    PROCEDURE ID
                            { procedureCode id-errorIndicationForCommon, ddMode common }
    CRITICALITY
                            ignore
-- *** CellSynchronisationReporting (TDD only) ***
cellSynchronisationReportingTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellSynchronisationReportTDD
   MESSAGE DISCRIMINATOR common
```

```
{ procedureCode id-cellSynchronisationReporting, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CellSynchronisationTermination (TDD only) ***
cellSynchronisationTerminationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellSynchronisationTerminationRequestTDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-cellSynchronisationTermination, ddMode tdd }
    CRITICALITY
                            ignore
-- *** CellSynchronisationFailure (TDD only) ***
cellSynchronisationFailureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellSynchronisationFailureIndicationTDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                              procedureCode id-cellSynchronisationFailure, ddMode tdd
    PROCEDURE ID
    CRITICALITY
-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-privateMessageForDedicated, ddMode common }
    CRITICALITY
                            ignore
-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
   MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-privateMessageForCommon, ddMode common }
    CRITICALITY
                            ignore
-- *** InformationReporting ***
informationReporting NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationReport
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationReporting, ddMode common }
    CRITICALITY
                            ignore
-- *** InformationExchangeTermination ***
informationExchangeTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeTerminationRequest
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationExchangeTermination, ddMode common }
    CRITICALITY
                            ignore
-- *** InformationExchangeFailure ***
informationExchangeFailure NBAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE
                            InformationExchangeFailureIndication
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                              procedureCode id-informationExchangeFailure, ddMode common }
    CRITICALITY
-- *** BearerRearrangement ***
bearerRearrangement NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            BearerRearrangementIndication
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-BearerRearrangement, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** RadioLinkActivation (FDD) ***
radioLinkActivationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkActivationCommandFDD
    INITIATING MESSAGE
                            dedicated
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkActivation, ddMode fdd
    CRITICALITY
                            ignore
-- *** RadioLinkActivation (TDD) ***
radioLinkActivationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkActivationCommandTDD
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkActivation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** RadioLinkParameterUpdate (FDD) ***
radioLinkParameterUpdateFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkParameterUpdateIndicationFDD
   MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkParameterUpdate, ddMode fdd }
    CRITICALITY
                            ignore
-- *** RadioLinkParameterUpdate (TDD) ***
radioLinkParameterUpdateTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkParameterUpdateIndicationTDD
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkParameterUpdate, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** MBMSNotificationUpdate ***
mBMSNotificationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            MBMSNotificationUpdateCommand
   MESSAGE DISCRIMINATOR
                            { procedureCode id-mBMSNotificationUpdate, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
```

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END

```
9.3.3 PDU Definitions
-- PDU definitions for NBAP.
__ ********************
NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
     *****
-- IE parameter types from other modules.
IMPORTS
   Active-Pattern-Sequence-Information,
   AddorDeleteIndicator,
   AICH-Power,
   AICH-TransmissionTiming,
   AllocationRetentionPriority,
   APPreambleSignature,
   APSubChannelNumber,
   AvailabilityStatus,
   BCCH-ModificationTime,
   BindingID,
   BlockingPriorityIndicator,
   SCTD-Indicator,
   Cause,
   CCTrCH-ID,
   CDSubChannelNumbers,
   CellParameterID,
   CellPortionID,
   CellSyncBurstCode,
   CellSyncBurstCodeShift,
   CellSyncBurstRepetitionPeriod,
   CellSyncBurstSIR,
   CellSyncBurstTiming,
   CellSyncBurstTimingThreshold,
   Channel-Assignment-Indication,
   ChipOffset,
   C-ID,
   Closedlooptimingadjustmentmode,
```

```
CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue.
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue.
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurement.ID.
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo.
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Common-Information,
```

```
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information.
DwPCH-Power,
E-AGCH-FDD-Code-Information,
E-DCH-Capability,
E-DCH-FDD-DL-Control-Channel-Information,
E-DCH-FDD-Information,
E-DCH-FDD-Information-Response,
E-DCH-FDD-Information-to-Modify,
E-DCH-MACdFlows-Information,
E-DCH-MACdFlows-to-Delete,
E-DCH-RL-Indication,
E-RGCH-E-HICH-FDD-Code-Information.
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
E-TFCS,
E-TTI,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HSDPA-Capability,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information,
HS-SICH-ID,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
Initial-DL-DPCH-TimingAdjustment-Allowed,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
IPDL-TDD-Parameters-LCR,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
```

```
Maximum-PDSCH-Power,
MaximumTransmissionPower,
Max-Number-of-PCPCHes.
MaxNrOfUL-DPDCHs,
MaxNrOfUL-E-DPDCHs.
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MeasurementRecoveryBehavior,
MeasurementRecoveryReportingIndicator,
MeasurementRecoverySupportIndicator,
MICH-CFN,
MICH-Mode.
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MinUL-ChannelisationCodeLengthforE-DCH-FDD,
Modification-Period,
MultiplexingPosition,
NEOT,
NCvclesPerSFNperiod.
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NI-Information,
NodeB-CommunicationContextID,
NotificationIndicatorLength,
NumberOfReportedCellPortions,
NStartMessage,
NSubCyclesPerCyclePeriod,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
```

```
PrimaryCPICH-Power,
Primary-CPICH-Usage-for-Channel-Estimation,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
Oth-Parameter,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNoffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
RL-Specific-DCH-Info,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
Secondary-CPICH-Information-Change,
SecondaryCCPCH-SlotFormat,
Segment-Type,
Serving-E-DCH-RL-ID,
S-FieldLength,
SFN.
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCDlCodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
```

```
T-Cell,
T-RLFAILURE.
TDD-ChannelisationCode.
TDD-ChannelisationCodeLCR.
TDD-DL-Code-LCR-Information.
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI2BearerRequestIndicator,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
TnlQos,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
TUTRANGPSQuality,
UARFCN,
UC-Id,
USCH-Information,
USCH-InformationResponse,
UL-CapacityCredit,
UL-DPCCH-SlotFormat,
UL-DPDCH-Indicator-For-E-DCH-Operation,
UL-SIR,
UL-FP-Mode,
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information,
UL-TimeslotLCR-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
UL-TimeslotISCP-Value,
UL-TimeslotISCP-Value-IncrDecrThres,
```

```
USCH-ID,
    HSDSCH-FDD-Information.
   HSDSCH-FDD-Information-Response.
    HSDSCH-Information-to-Modify,
    HSDSCH-Information-to-Modify-Unsynchronised,
    HSDSCH-MACdFlow-ID,
    HSDSCH-MACdFlows-Information,
    HSDSCH-MACdFlows-to-Delete,
    HSDSCH-RNTI,
    HSDSCH-TDD-Information,
    HSDSCH-TDD-Information-Response,
    PrimaryCCPCH-RSCP,
    HSDSCH-FDD-Update-Information,
    HSDSCH-TDD-Update-Information,
    UL-Synchronisation-Parameters-LCR,
    TDD-DL-DPCH-TimeSlotFormat-LCR,
   TDD-UL-DPCH-TimeSlotFormat-LCR,
    TDD-TPC-UplinkStepSize-LCR,
    CellSyncBurstTimingLCR,
   TimingAdjustmentValueLCR,
    PrimaryCCPCH-RSCP-Delta
FROM NBAP-IES
    PrivateIE-Container{},
    ProtocolExtensionContainer{},
    ProtocolIE-Container{},
    ProtocolIE-Single-Container{},
    ProtocolIE-ContainerList{},
    NBAP-PRIVATE-IES,
    NBAP-PROTOCOL-IES,
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers
    id-Active-Pattern-Sequence-Information,
    id-Additional-S-CCPCH-Parameters-CTCH-ReconfRgstTDD.
    id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD,
    id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD,
    id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRgstTDD,
    id-AdjustmentRatio,
    id-AICH-Information,
    id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-AP-AICH-Information,
    id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-BCH-Information,
    id-BCCH-ModificationTime,
    id-bindingID,
    id-BlockingPriorityIndicator,
    id-Cause,
    id-CauseLevel-PSCH-ReconfFailure,
    id-CauseLevel-RL-AdditionFailureFDD,
    id-CauseLevel-RL-AdditionFailureTDD,
    id-CauseLevel-RL-ReconfFailure,
    id-CauseLevel-RL-SetupFailureFDD,
    id-CauseLevel-RL-SetupFailureTDD,
```

```
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp.
id-CCP-InformationList-AuditRsp.
id-CCP-InformationItem-ResourceStatusInd.
id-CCTrCH-InformationItem-RL-FailureInd.
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CCTrCH-Initial-DL-Power-RL-AdditionRgstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRgstTDD,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRgstTDD,
id-Cell-InformationItem-AuditRsp.
id-Cell-InformationItem-ResourceStatusInd.
id-Cell-InformationList-AuditRsp.
id-CellParameterID,
id-CellPortion-InformationItem-Cell-SetupRgstFDD,
id-CellPortion-InformationList-Cell-SetupRqstFDD,
id-CellSyncBurstTransInit-CellSyncInitiationRgstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRgstTDD.
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRgstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRgstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID.
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rgst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRgstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRgstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRgstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
```

```
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD.
id-DCH-DeleteList-RL-ReconfPrepFDD.
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRastFDD.
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify.
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rgst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRgstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRgstTDD.
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRgstFDD,
id-DL-DPCH-Information-RL-SetupRgstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-DPCH-Power-Information-RL-ReconfPrepFDD,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rgst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rast,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
```

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id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD.
id-DSCHs-to-Add-TDD.
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information.
id-DSCH-ModifyItem-RL-ReconfPrepFDD.
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code,
id-E-AGCH-FDD-Code-Information.
id-E-DCH-Capability,
id-E-DCH-FDD-DL-Control-Channel-Information,
id-E-DCH-FDD-Information.
id-E-DCH-FDD-Information-Response,
id-E-DCH-FDD-Information-to-Modify,
id-E-DCH-MACdFlows-to-Add,
id-E-DCH-MACdFlows-to-Delete.
id-E-DCH-Resources-Information-AuditRsp.
id-E-DCH-Resources-Information-ResourceStatusInd.
id-E-DCH-RL-Indication.
id-E-DCH-RL-Set-ID,
id-E-DPCH-Information-RL-ReconfPrepFDD,
id-E-DPCH-Information-RL-ReconfRgstFDD,
id-E-DPCH-Information-RL-SetupRgstFDD,
id-E-RGCH-E-HICH-FDD-Code-Information,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator.
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRgstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRgstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-F-DPCH-Information-RL-ReconfPrepFDD,
id-F-DPCH-Information-RL-SetupRgstFDD,
id-HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst,
id-HSDPA-CellPortion-InformationList-PSCH-ReconfRqst,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp.
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-Initial-DL-DPCH-TimingAdjustment,
id-Initial-DL-DPCH-TimingAdjustment-Allowed,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
```

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id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRgstTDD.
id-IPDLParameter-Information-Cell-SetupRgstTDD.
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRgstFDD,
id-Local-Cell-ID.
id-Local-Cell-Group-InformationItem-AuditRsp.
id-Local-Cell-Group-InformationItem-ResourceStatusInd.
id-Local-Cell-Group-InformationItem2-ResourceStatusInd.
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd.
id-Local-Cell-InformationList-AuditRsp.
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MeasurementRecoveryBehavior,
id-MeasurementRecoveryReportingIndicator,
id-MeasurementRecoverySupportIndicator,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-MICH-CFN,
id-MICH-Information-AuditRsp.
id-MICH-Information-ResourceStatusInd.
id-MICH-Parameters-CTCH-ReconfRgstFDD,
id-MICH-Parameters-CTCH-ReconfRqstTDD,
id-MICH-Parameters-CTCH-SetupRgstFDD,
id-MICH-Parameters-CTCH-SetupRgstTDD,
id-Modification-Period.
id-multipleRL-dl-DPCH-InformationList,
id-multipleRL-dl-DPCH-InformationModifyList,
id-multiple-RL-Information-RL-ReconfPrepTDD,
id-multiple-RL-Information-RL-ReconfRgstTDD,
id-multipleRL-ul-DPCH-InformationList,
id-multipleRL-ul-DPCH-InformationModifyList,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NI-Information-NotifUpdateCmd,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-NumberOfReportedCellPortions,
id-P-CCPCH-Information.
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRgstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRgstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRgstTDD,
id-PCH-Information,
```

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id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRgstFDD.
id-PDSCH-Information-AddListIE-PSCH-ReconfRgst.
id-PDSCH-Information-Cell-SetupRqstFDD,
id-PDSCH-Information-Cell-ReconfRqstFDD.
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCH-RL-ID,
id-PDSCHSets-AddList-PSCH-ReconfRast,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRast,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRgstTDD.
id-PICH-ParametersItem-CTCH-SetupRgstTDD.
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-choice-CM-Rgst,
id-Power-Local-Cell-Group-choice-CM-Rsp,
id-Power-Local-Cell-Group-choice-CM-Rprt,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp.
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID,
id-PRACH-Information,
id-PRACHConstant.
id-PRACH-ParametersItem-CTCH-SetupRgstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRgstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRgstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRgstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-Primary-CPICH-Usage-for-Channel-Estimation,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRgstFDD.
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRgstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRgst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-Oth-Parameter,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp.
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
```

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id-ResetIndicator,
id-RL-ID.
id-RL-InformationItem-DM-Rprt.
id-RL-InformationItem-DM-Rgst,
id-RL-InformationItem-DM-Rsp.
id-RL-InformationItem-RL-AdditionRgstFDD,
id-RL-informationItem-RL-DeletionRgst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRgstFDD.
id-RL-InformationList-RL-AdditionRgstFDD,
id-RL-informationList-RL-DeletionRgst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRgstFDD,
id-RL-InformationList-RL-SetupRgstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRgstTDD,
id-RL-Information-RL-ReconfRgstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRgstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp.
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,
id-S-CCPCH-InformationListExt-AuditRsp,
id-S-CCPCH-InformationListExt-ResourceStatusInd,
id-S-CCPCH-LCR-InformationListExt-AuditRsp,
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd.
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRgstTDD,
id-Secondary-CPICH-Information,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
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id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-Secondary-CPICH-Information-Change.
id-SecondarySCH-Information-Cell-ReconfRgstFDD.
id-SecondarySCH-Information-Cell-SetupRgstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-Serving-E-DCH-RL-ID,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC.
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRgstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2BearerRequestIndicator,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRgstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRgstTDD,
id-TimeslotISCPInfo.
id-TimingAdvanceApplied,
id-TnlOos,
id-TransmissionDiversityApplied.
id-transportlayeraddress,
id-Tstd-indicator,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRgstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
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id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD.
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD.
id-UL-DPCH-Information-RL-ReconfPrepFDD.
id-UL-DPCH-Information-RL-ReconfRgstFDD.
id-UL-DPCH-Information-RL-SetupRgstFDD,
id-UL-DPDCH-Indicator-For-E-DCH-Operation,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD.
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD.
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD.
id-USCH-Information-Add.
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-USCH-RearrangeList-Bearer-RearrangeInd,
id-DL-DPCH-LCR-Information-RL-SetupRgstTDD,
id-DwPCH-LCR-Information
id-DwPCH-LCR-InformationList-AuditRsp.
id-DwPCH-LCR-Information-Cell-SetupRgstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRgstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd.
id-maxFACH-Power-LCR-CTCH-SetupRgstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRgstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp,
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRgstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRgstTDD,
id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRgstTDD,
id-PRACH-LCR-ParametersList-CTCH-SetupRgstTDD,
id-RL-InformationResponse-LCR-RL-SetupRspTDD
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRgstTDD,
id-TimeSlot.
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRgstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRgstTDD,
id-TimeSlotLCR-CM-Rast,
id-UL-DPCH-LCR-Information-RL-SetupRgstTDD,
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRgstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RgstTDD,
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id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-LCR-InformationModify-AddList.
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD.
id-UL-SIRTarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRgst.
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRgst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRgst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRgst,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Info-DM-Rast.
id-PUSCH-Info-DM-Rsp.
id-PUSCH-Info-DM-Rprt,
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
id-IPDLParameter-Information-LCR-Cell-SetupRgstTDD,
id-IPDLParameter-Information-LCR-Cell-ReconfRgstTDD,
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst,
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRgst,
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRgst.
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRast,
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRgst,
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRgstTDD,
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD,
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD,
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRgstTDD,
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRgstTDD,
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD,
id-DwPCH-Power,
id-AccumulatedClockupdate-CellSvncReprtTDD,
id-HSDPA-Capability,
id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-Information-to-Modify-Unsynchronised,
id-HSDSCH-MACdFlows-to-Add,
id-HSDSCH-MACdFlows-to-Delete,
id-HSDSCH-RearrangeList-Bearer-RearrangeInd,
id-HSDSCH-Resources-Information-AuditRsp,
id-HSDSCH-Resources-Information-ResourceStatusInd,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
id-HSPDSCH-RL-ID,
id-HSSICH-Info-DM-Rprt,
id-HSSICH-Info-DM-Rgst,
id-HSSICH-Info-DM-Rsp,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,
id-HSDSCH-FDD-Update-Information,
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id-HSDSCH-TDD-Update-Information,
id-UL-Synchronisation-Parameters-LCR,
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD.
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD,
id-CCTrCH-Maximum-DL-Power-RL-SetupRgstTDD.
id-CCTrCH-Minimum-DL-Power-RL-SetupRgstTDD,
id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Minimum-DL-Power-RL-AdditionRgstTDD,
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD,
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD,
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRgstTDD,
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD,
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRgstTDD,
id-TDD-TPC-DownlinkStepSize-RL-AdditionRgstTDD,
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD.
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD.
id-TimingAdjustmentValueLCR,
id-PrimaryCCPCH-RSCP-Delta,
maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSs.
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDPCHLCRs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1.
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs.
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHsinExt,
maxNrOfSCCPCHLCRs,
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maxNrOfSCCPCHsLCRinExt,
   maxNrOfULTSs,
   maxNrOfULTSLCRs.
   maxNrOfUSCHs,
   maxAPSiqNum,
   maxCPCHCell,
   maxFACHCell,
   maxFPACHCell,
   maxNoofLen,
   maxRACHCell,
   maxPCPCHCell,
   maxPRACHCell,
   maxSCCPCHCell,
   maxSCCPCHCellinExt,
   maxSCCPCHCellinExtLCR,
   maxSCPICHCell,
   maxCellinNodeB
   maxCCPinNodeB,
   maxCommunicationContext,
   maxLocalCellinNodeB,
   maxNrOfSlotFormatsPRACH,
   maxIB,
   maxIBSEG,
   maxNrOfCellPortionsPerCell,
   maxNrOfHSSCCHs,
   maxNrOfHSSICHs,
   maxNrOfHSPDSCHs,
   maxNrOfSyncFramesLCR,
   maxNrOfReceptionsperSyncFrameLCR,
   maxNrOfSyncDLCodesLCR,
   maxNrOfMACdFlows
FROM NBAP-Constants;
      -- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
  *****************
CommonTransportChannelSetupRequestFDD ::= SEQUENCE {
                                                 {{CommonTransportChannelSetupRequestFDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer {{CommonTransportChannelSetupRequestFDD-Extensions}}
                                                                                                          OPTIONAL,
   . . .
CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
           id-C-ID
                                                            CRITICALITY reject
     ID
                                                                                   TYPE
                                                                                          C-ID
                                                                                                       PRESENCE mandatory } |
     ID
          id-ConfigurationGenerationID
                                                            CRITICALITY reject
                                                                                   TYPE
                                                                                          ConfigurationGenerationID PRESENCE mandatory } |
           id-CommonPhysicalChannelType-CTCH-SetupRqstFDD
                                                            CRITICALITY ignore
                                                                                  TYPE
                                                                                          CommonPhysicalChannelType-CTCH-SetupRqstFDD
   PRESENCE
              mandatory },
```

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CommonPhysicalChannelType-CTCH-SetupRqstFDD ::= CHOICE {
   secondary-CCPCH-parameters
                                 Secondary-CCPCH-CTCH-SetupRqstFDD,
   pRACH-parameters
                                 PRACH-CTCH-SetupRqstFDD,
   pCPCHes-parameters
                                 PCPCH-CTCH-SetupRqstFDD,
Secondary-CCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   fdd-S-CCPCH-Offset
                                         FDD-S-CCPCH-Offset,
   dl-ScramblingCode
                                         DL-ScramblingCode OPTIONAL,
   -- This IE shall be present if the PCH Parameters IE is not present
   fdd-DL-ChannelisationCodeNumber
                                         FDD-DL-ChannelisationCodeNumber,
   +FCS
                                         TFCS,
   secondary-CCPCH-SlotFormat
                                         SecondaryCCPCH-SlotFormat,
   tFCI-Presence
                                         TFCI-Presence OPTIONAL,
   -- This IE shall be present if the Secondary CCPCH Slot Format is set to any of the values from 8 to 17
   multiplexingPosition
                                         MultiplexingPosition,
   powerOffsetInformation
                                         PowerOffsetInformation-CTCH-SetupRqstFDD,
   sTTD-Indicator
                                         STTD-Indicator,
                                         FACH-ParametersList-CTCH-SetupRqstFDD
   fACH-Parameters
                                                                                  OPTIONAL,
   pCH-Parameters
                                         PCH-Parameters-CTCH-SetupRgstFDD
                                                                                  OPTIONAL,
                                         ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                       OPTIONAL,
Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-MICH-Parameters-CTCH-SetupRqstFDD
                                                CRITICALITY reject EXTENSION MICH-Parameters-CTCH-SetupRqstFDD
                                                                                                               PRESENCE optional },
   . . .
PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
   pO1-ForTFCI-Bits
                                         PowerOffset,
   pO3-ForPilotBits
                                         PowerOffset,
   iE-Extensions
                                         ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-SetupRgstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRgstFDD }}
FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    FACH-ParametersListIE-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstFDD
FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
                                     CommonTransportChannelID,
   commonTransportChannelID
```

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transportFormatSet
                                    TransportFormatSet,
   toAWS
                                    ToAWS,
                                    TOAWE.
   t.oAWE
   maxFACH-Power
                                    DL-Power,
   iE-Extensions
                                    OPTIONAL.
FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      id-bindingID
                                       CRITICALITY ignore
                                                             EXTENSION
                                                                        BindingID
                                                                                        PRESENCE
                                                                                                  optional }
{ ID
      id-transportlayeraddress
                                       CRITICALITY ignore
                                                                        TransportLayerAddress PRESENCE
                                                             EXTENSION
                                                                                                        optional },
   . . .
PCH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstFDD }}
PCH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
   PCH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                    CommonTransportChannelID,
   transportFormatSet
                                    TransportFormatSet,
   toAWS
                                    ToAWS,
   toAWE
                                    TOAWE,
   pCH-Power
                                    DL-Power,
   pICH-Parameters
                                    PICH-Parameters-CTCH-SetupRqstFDD,
   iE-Extensions
                                    ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRgstFDD-ExtIEs} }
                                                                                                             OPTIONAL,
PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
          id-bindingID
                                           CRITICALITY ignore
                                                                           BindingID
                                                                                        PRESENCE
                                                                                                  optional }
                                                                 EXTENSION
          id-transportlayeraddress
                                           CRITICALITY ignore
    ID
                                                                 EXTENSION
                                                                           TransportLayerAddress PRESENCE optional },
PICH-Parameters-CTCH-SetupRgstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                           CommonPhysicalChannelID,
   fdd-dl-ChannelisationCodeNumber
                                           FDD-DL-ChannelisationCodeNumber,
   pICH-Power
                                           PICH-Power,
   pICH-Mode
                                           PICH-Mode,
   sTTD-Indicator
                                           STTD-Indicator,
                                           ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} } 
   iE-Extensions
                                                                                                                   OPTIONAL,
   . . .
PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                           CommonPhysicalChannelID,
   fdd-dl-ChannelisationCodeNumber
                                           FDD-DL-ChannelisationCodeNumber,
```

```
mICH-Power
                                       PICH-Power,
   mICH-Mode
                                       MICH-Mode,
   sTTD-Indicator
                                       STTD-Indicator.
   iE-Extensions
                                       ProtocolExtensionContainer { { MICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                       OPTIONAL,
MICH-Parameters-CTCH-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                       CommonPhysicalChannelID,
   scramblingCodeNumber
                                       ScramblingCodeNumber,
   t.FCS
                                       TFCS,
   preambleSignatures
                                       PreambleSignatures,
                                       AllowedSlotFormatInformationList-CTCH-SetupRgstFDD,
   allowedSlotFormatInformation
   rACH-SubChannelNumbers
                                       RACH-SubChannelNumbers,
   ul-punctureLimit
                                       PunctureLimit,
   preambleThreshold
                                       PreambleThreshold,
   rACH-Parameters
                                       RACH-Parameters-CTCH-SetupRqstFDD,
   aICH-Parameters
                                       AICH-Parameters-CTCH-SetupRqstFDD,
                                       iE-Extensions
                                                                                                  OPTIONAL,
   . . .
PRACHITEM-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEOUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
SetupRqstFDD
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   rACHSlotFormat
                                       RACH-SlotFormat,
   iE-Extensions
                                       OPTIONAL,
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ RACH-ParametersIE-CTCH-SetupRqstFDD }}
RACH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
   RACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                       CommonTransportChannelID,
   transportFormatSet
                                       TransportFormatSet,
   iE-Extensions
```

```
. . .
RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-bindingID
                                               CRITICALITY ignore
                                                                                   BindingID
                                                                                                            optional }
                                                                       EXTENSION
                                                                                                PRESENCE
           id-transportlayeraddress
                                               CRITICALITY ignore
     ID
                                                                       EXTENSION
                                                                                  TransportLayerAddress PRESENCE
                                                                                                                     optional },
AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                               CommonPhysicalChannelID,
    aICH-TransmissionTiming
                                               AICH-TransmissionTiming,
    fdd-dl-ChannelisationCodeNumber
                                               FDD-DL-ChannelisationCodeNumber,
    aICH-Power
                                               AICH-Power.
    sTTD-Indicator
                                               STTD-Indicator,
    iE-Extensions
                                               ProtocolExtensionContainer { { AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                                             OPTIONAL,
    . . .
AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCPCH-CTCH-SetupRastFDD ::= SEOUENCE
    cPCH-Parameters
                                   CPCH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions
                                   OPTIONAL,
    . . .
PCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
CPCH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                   CommonTransportChannelID,
    transportFormatSet
                                   TransportFormatSet,
    aPPreambleScramblingCode
                                   CPCHScramblingCodeNumber,
    cDPreambleScramblingCode
                                   CPCHScramblingCodeNumber,
    tFCS
                                   TFCS,
    cDSignatures
                                   PreambleSignatures
                                                               OPTIONAL,
                                   CDSubChannelNumbers
    cDSubChannelNumbers
                                                               OPTIONAL,
    punctureLimit
                                   PunctureLimit,
                                   CPCH-UL-DPCCH-SlotFormat,
    cPCH-UL-DPCCH-SlotFormat
    uL-SIR
                                   UL-SIR,
    initialDL-transmissionPower
                                   DL-Power,
    maximumDLPower
                                   DL-Power,
    minimumDLPower
                                   DL-Power,
    pO2-ForTPC-Bits
                                   PowerOffset,
    fDD-TPC-DownlinkStepSize
                                   FDD-TPC-DownlinkStepSize,
    nStartMessage
                                   NStartMessage,
    nEOT
                                   NEOT,
    channel-Assignment-Indication
                                   Channel-Assignment-Indication,
    cPCH-Allowed-Total-Rate
                                   CPCH-Allowed-Total-Rate,
                                   PCPCHChannelInformationList-CTCH-SetupRqstFDD,
    pCPCHChannelInfomation
```

```
vCAMMapping-Information
                                   VCAMMapping-InformationList-CTCH-SetupRqstFDD
                                                                                     OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is set to "CA Active' --
                                   AP-AICH-Parameters-CTCH-SetupRqstFDD,
    aP-AICH-Parameters
    cDCA-ICH-Parameters
                                   CDCA-ICH-Parameters-CTCH-SetupRqstFDD,
                                   ProtocolExtensionContainer { { CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL.
CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID
           id-bindingID
                                              CRITICALITY ignore
                                                                      EXTENSION
                                                                                  BindingID
                                                                                               PRESENCE
                                                                                                          optional }
     ID
           id-transportlayeraddress
                                              CRITICALITY ignore
                                                                      EXTENSION
                                                                                 TransportLayerAddress PRESENCE
                                                                                                                   optional },
    . . .
PCPCHChannelInformationList-CTCH-SetupRqstFDD ::= SEOUENCE (SIZE (1..maxNrOfPCPCHs)) OF PCPCHChannelInformationItem-CTCH-SetupRqstFDD
PCPCHChannelInformationItem-CTCH-SetupRgstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                       CommonPhysicalChannelID,
                                       CPCHScramblingCodeNumber,
    cPCHScramblingCodeNumber
   dL-ScramblingCode
                                      DL-ScramblingCode,
    fdd-dl-ChannelisationCodeNumber
                                       FDD-DL-ChannelisationCodeNumber,
   pCP-Length
                                      PCP-Length,
   uCSM-Information
                                      UCSM-Information-CTCH-SetupRqstFDD
                                                                              OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is equal to "CA Inactive' --
   iE-Extensions
                                       OPTIONAL,
    . . .
PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UCSM-Information-CTCH-SetupRqstFDD ::= SEQUENCE {
   minUL-ChannelisationCodeLength
                                      MinUL-ChannelisationCodeLength,
   nFmax
                                      NFmax,
    channelRequestParameters
                                       ChannelRequestParametersList-CTCH-SetupRqstFDD
                                                                                         OPTIONAL,
    iE-Extensions
                                       ProtocolExtensionContainer { { UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                                         OPTIONAL,
UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ChannelRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF ChannelRequestParametersItem-CTCH-SetupRqstFDD
ChannelRequestParametersItem-CTCH-SetupRgstFDD ::= SEOUENCE {
   aPPreambleSignature
                               APPreambleSignature,
    aPSubChannelNumber
                               APSubChannelNumber
                                                      OPTIONAL,
   iE-Extensions
                               ProtocolExtensionContainer { { ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                                         OPTIONAL,
ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
VCAMMapping-InformationList-CTCH-SetupRgstFDD ::= SEQUENCE (SIZE (1..maxNoofLen)) OF VCAMMapping-InformationItem-CTCH-SetupRgstFDD
VCAMMapping-InformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   minUL-ChannelisationCodeLength
                                      MinUL-ChannelisationCodeLength,
                                      NFmax,
   max-Number-of-PCPCHes
                                      Max-Number-of-PCPCHes,
    sFRequestParameters
                                      SFRequestParametersList-CTCH-SetupRqstFDD,
                                      ProtocolExtensionContainer { { VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
VCAMMapping-InformationItem-CTCH-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFRequestParametersList-CTCH-SetupRqstFDD ::= SEOUENCE (SIZE (1..maxAPSiqNum)) OF SFRequestParametersItem-CTCH-SetupRqstFDD
SFRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   aPPreambleSignature
                              APPreambleSignature,
   aPSubChannelNumber
                              APSubChannelNumber
                                                     OPTIONAL,
                              ProtocolExtensionContainer { { SFRequestParametersItem-CTCH-SetupRgstFDD-ExtIEs} }
   iE-Extensions
SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION::= {
AP-AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                              CommonPhysicalChannelID,
   fdd-dl-ChannelisationCodeNumber
                                              FDD-DL-ChannelisationCodeNumber,
   aP-AICH-Power
                                              AICH-Power,
   cSICH-Power
                                              AICH-Power,
   sTTD-Indicator
                                              STTD-Indicator,
                                              ProtocolExtensionContainer { AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                             OPTIONAL,
AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
CDCA-ICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                              CommonPhysicalChannelID,
   fdd-dl-ChannelisationCodeNumber
                                              FDD-DL-ChannelisationCodeNumber,
   cDCA-ICH-Power
                                              AICH-Power,
    sTTD-Indicator
                                              STTD-Indicator,
                                              iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
```

```
CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
        CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                               {{CommonTransportChannelSetupRequestTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}}
                                                                                                     OPTIONAL.
CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     TD
          id-C-ID
                                                      CRITICALITY reject TYPE C-ID
                                                                                             PRESENCE mandatory } |
          id-ConfigurationGenerationID
                                                      CRITICALITY reject TYPE ConfigurationGenerationID
          ID
                                                                                                                        PRESENCE
   mandatory },
   . . .
CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-SetupRgstTDD ::= CHOICE {
   secondary-CCPCH-parameters
                                           Secondary-CCPCH-CTCH-SetupRgstTDD,
   pRACH-parameters
                                           PRACH-CTCH-SetupRqstTDD,
Secondary-CCPCH-CTCH-SetupRgstTDD ::= SEOUENCE {
   sCCPCH-CCTrCH-ID
                                           CCTrCH-ID, -- For DL CCTrCH supporting one or several Secondary CCPCHs
   tFCS
                                                      -- For DL CCTrCH supporting one or several Secondary CCPCHs
   tFCI-Coding
                                           TFCI-Coding,
                                           PunctureLimit,
   punctureLimit
   secondaryCCPCH-parameterList
                                           Secondary-CCPCH-parameterList-CTCH-SetupRgstTDD,
                                           FACH-ParametersList-CTCH-SetupRgstTDD
   fACH-ParametersList
                                                                                   OPTIONAL,
   pCH-Parameters
                                           PCH-Parameters-CTCH-SetupRqstTDD
                                                                                   OPTIONAL,
   iE-Extensions
                                           ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}}
Secondary-CCPCHItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-Tstd-indicator
                                                  CRITICALITY reject EXTENSION TSTD-Indicator
                                                                                                   PRESENCE optional } |
     ID id-MICH-Parameters-CTCH-SetupRqstTDD
                                                  CRITICALITY reject EXTENSION MICH-Parameters-CTCH-SetupRqstTDD
                                                                                                                 PRESENCE optional } |
     ID id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD
                                                             CRITICALITY reject EXTENSION Secondary-CCPCH-parameterExtendedList-CTCH-
SetupRastTDD
                 PRESENCE optional }|
   -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be established.
   { ID id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRqstTDD
                                                             CRITICALITY reject EXTENSION Secondary-CCPCH-LCR-parameterExtendedList-CTCH-
SetupRqstTDD
                  PRESENCE optional },
```

```
-- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHLCRs SCCPCHs are to be established.
Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}
Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRgstTDD CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRgstTDD
   PRESENCE optional } |
   { ID id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD
   PRESENCE optional }
Secondary-CCPCH-parameterListIE-CTCH-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRgstTDD
Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
                                           CommonPhysicalChannelID,
   commonPhysicalChannelID
   tdd-ChannelisationCode
                                           TDD-ChannelisationCode,
   timeslot
                                           TimeSlot,
                                           MidambleShiftAndBurstType,
   midambleShiftandBurstType
   tdd-PhysicalChannelOffset
                                           TDD-PhysicalChannelOffset,
   repetitionPeriod
                                           RepetitionPeriod,
   repetitionLength
                                           RepetitionLength,
   s-CCPCH-Power
                                           DL-Power,
   iE-Extensions
                                           ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
   . . .
Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}
FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEOUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD
FACH-ParametersItem-CTCH-SetupRgstTDD ::= SEQUENCE {
   commonTransportChannelID
                                        CommonTransportChannelID,
   fACH-CCTrCH-ID
                                        CCTrCH-ID,
   dl-TransportFormatSet
                                        TransportFormatSet,
                                        ToAWS,
   toAWS
   toAWE
                                        TOAWE,
   iE-Extensions
                                        OPTIONAL,
FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-maxFACH-Power-LCR-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION DL-Power
                                                                                         PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only
```

```
CRITICALITY ignore EXTENSION BindingID
                                                                                  PRESENCE optional } |
   { ID id-bindingID
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlaveraddress
                                           CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
   -- Shall be ignored if bearer establishment with ALCAP.
PCH-Parameters-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRgstTDD }}
PCH-ParametersIE-CTCH-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
   PCH-ParametersItem-CTCH-SetupRgstTDD ::= SEQUENCE {
   commonTransportChannelID
                                    CommonTransportChannelID,
   pCH-CCTrCH-ID
                                    CCTrCH-ID,
   dl-TransportFormatSet
                                    TransportFormatSet, -- For the DL.
   toAWS
                                    ToAWS,
   toAWE
                                    TOAWE,
   pICH-Parameters
                                    PICH-Parameters-CTCH-SetupRgstTDD,
   iE-Extensions
                                    ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
                                                                                                          OPTIONAL,
PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         id-PCH-Power-LCR-CTCH-SetupRqstTDD
                                               CRITICALITY reject EXTENSION DL-Power
                                                                                  PRESENCE optional }
   { ID
         id-bindingID
                                               CRITICALITY ignore EXTENSION BindingID PRESENCE optional }
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                              CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
   -- Shall be ignored if bearer establishment with ALCAP.
   . . .
PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}
PICH-ParametersIE-CTCH-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                    CommonPhysicalChannelID,
   tdd-ChannelisationCode
                                    TDD-ChannelisationCode,
   timeSlot
                                    TimeSlot,
   midambleshiftAndBurstType
                                    MidambleShiftAndBurstType,
   tdd-PhysicalChannelOffset
                                    TDD-PhysicalChannelOffset,
   repetitionPeriod
                                    RepetitionPeriod,
   repetitionLength
                                    RepetitionLength,
   pagingIndicatorLength
                                    PagingIndicatorLength,
   pICH-Power
                                    PICH-Power,
                                    ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                          OPTIONAL,
   . . .
```

```
PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PICH-LCR-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE
    commonPhysicalChannelID
                                           CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR,
    timeSlotLCR
                                           TimeSlotLCR,
    midambleShiftLCR
                                           MidambleShiftLCR,
    tdd-PhysicalChannelOffset
                                           TDD-PhysicalChannelOffset,
    repetitionPeriod
                                           RepetitionPeriod,
    repetitionLength
                                           RepetitionLength,
    pagingIndicatorLength
                                           PagingIndicatorLength,
    pICH-Power
                                           PICH-Power.
    second-TDD-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR,
    iE-Extensions
                                           ProtocolExtensionContainer
                                                                       OPTIONAL,
    . . .
PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     id-Tstd-indicator
                                   CRITICALITY reject
                                                           EXTENSION TSTD-Indicator
                                                                                           PRESENCE
                                                                                                      optional },
    -- Applicable to 1.28 Mcps TDD only
Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-
SetupRastTDD
Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRgstTDD ::= SEQUENCE
    commonPhysicalChannelID
                                               CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                               TDD-ChannelisationCodeLCR,
    timeslotLCR
                                               TimeSlotLCR,
    midambleShiftLCR
                                               MidambleShiftLCR,
    tdd-PhysicalChannelOffset
                                               TDD-PhysicalChannelOffset,
    repetitionPeriod
                                               RepetitionPeriod,
    repetitionLength
                                               RepetitionLength,
    s-CCPCH-Power
                                               DL-Power,
    s-CCPCH-TimeSlotFormat-LCR
                                               TDD-DL-DPCH-TimeSlotFormat-LCR,
                                               ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRgstTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
MICH-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                           CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset
                                           TDD-PhysicalChannelOffset,
    repetitionPeriod
                                           RepetitionPeriod,
    repetitionLength
                                           RepetitionLength,
    notificationIndicatorLength
                                           NotificationIndicatorLength,
                                           PICH-Power,
    mICH-Power
```

```
mICH-TDDOption-Specific-Parameters
                                            MICH-TDDOption-Specific-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions
                                            ProtocolExtensionContainer { { MICH-Parameters-CTCH-SetupRgstTDD-ExtIEs} } }
                                                                                                                              OPTIONAL,
    . . .
MICH-Parameters-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-TDDOption-Specific-Parameters-CTCH-SetupRqstTDD ::= CHOICE
                                            MICH-HCR-Parameters-CTCH-SetupRqstTDD,
   hCR-TDD
   1CR-TDD
                                            MICH-LCR-Parameters-CTCH-SetupRqstTDD,
    . . .
MICH-HCR-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE {
                                            TDD-ChannelisationCode,
    tdd-ChannelisationCode
    timeSlot
                                            TimeSlot,
    midambleshiftAndBurstType
                                            MidambleShiftAndBurstType,
                                            ProtocolExtensionContainer { { MICH-HCR-Parameters-CTCH-SetupRgstTDD-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL.
    . . .
MICH-HCR-Parameters-CTCH-SetupRostTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-LCR-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE {
                                            TDD-ChannelisationCodeLCR,
    tdd-ChannelisationCodeLCR
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    second-TDD-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    tSTD-Indicator
                                            TSTD-Indicator,
                                            ProtocolExtensionContainer { { MICH-LCR-Parameters-CTCH-SetupRqstTDD-ExtlEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
MICH-LCR-Parameters-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-parameterExtendedList-CTCH-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsinExt)) OF Secondary-CCPCH-parameterItem-CTCH-
SetupRastTDD
    -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be established.
Secondary-CCPCH-LCR-parameterExtendedList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsLCRinExt)) OF Secondary-CCPCH-LCR-parameterItem-
CTCH-SetupRastTDD
    -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHLCRs SCCPCHs are to be established.
PRACH-CTCH-SetupRgstTDD ::= SEQUENCE {
    pRACH-Parameters-CTCH-SetupRqstTDD
                                                PRACH-Parameters-CTCH-SetupRgstTDD,
                                                ProtocolExtensionContainer { { PRACH-CTCH-SetupRqstTDD-ExtIEs } }
   iE-Extensions
                                                                                                                        OPTIONAL,
```

```
PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}
PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
     ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD
                                                 CRITICALITY reject TYPE PRACH-ParametersItem-CTCH-SetupRqstTDD
                                                                                                              PRESENCE optional } |
    { ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD CRITICALITY reject TYPE PRACH-LCR-ParametersList-CTCH-SetupRqstTDD PRESENCE optional }
PRACH-ParametersItem-CTCH-SetupRgstTDD ::= SEQUENCE {
                                          CommonPhysicalChannelID,
   commonPhysicalChannelID
   t.FCS
                                          TFCS,
   timeslot
                                          TimeSlot,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   maxPRACH-MidambleShifts
                                          MaxPRACH-MidambleShifts,
   pRACH-Midamble
                                          PRACH-Midamble,
   rACH
                                          RACH-Parameter-CTCH-SetupRqstTDD,
   iE-Extensions
                                          ProtocolExtensionContainer { | PRACH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
                                                                                                                      OPTIONAL,
PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRqstTDD }}
RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE
   commonTransportChannelID
                                          CommonTransportChannelID,
   uL-TransportFormatSet
                                          TransportFormatSet, -- For the UL
                                          ProtocolExtensionContainer { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs} } }
   iE-Extensions
                                                                                                                   OPTIONAL,
RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-bindingID
                                   CRITICALITY ignore EXTENSION BindingID
                                                                                     PRESENCE optional }
      -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                   CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                     PRESENCE optional },
       -- Shall be ignored if bearer establishment with ALCAP.
   . . .
PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD
```

```
PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                           CommonPhysicalChannelID,
   t.FCS
                                           TFCS.
   timeslotLCR
                                           TimeSlotLCR,
   tdd-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR.
   midambleShiftLCR
                                           MidambleShiftLCR,
   rACH
                                           RACH-Parameter-CTCH-SetupRqstTDD,
   iE-Extensions
                                           ProtocolExtensionContainer { PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
                                                                                                                            OPTIONAL,
PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FPACH-LCR-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                           CommonPhysicalChannelID,
   tdd-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR,
   timeslotLCR
                                           TimeSlotLCR,
   midambleShiftLCR
                                           MidambleShiftLCR,
   fPACH-Power
                                           FPACH-Power,
                                           ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                            OPTIONAL,
FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
        *************
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
  *****************
CommonTransportChannelSetupResponse ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{CommonTransportChannelSetupResponse-IEs}},
                         ProtocolExtensionContainer {{CommonTransportChannelSetupResponse-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL,
CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
     PRESENCE optional }
                                                                                                                 PRESENCE optional
     ID id-PCH-Parameters-CTCH-SetupRsp
                                           CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
     ID id-RACH-Parameters-CTCH-SetupRsp
                                           CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
                                                                                                                 PRESENCE optional
     ID id-CPCH-Parameters-CTCH-SetupRsp
                                           CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
                                                                                                                 PRESENCE optional }
    ID id-CriticalityDiagnostics
                                           CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                 PRESENCE optional }.
CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse
  *****************
  COMMON TRANSPORT CHANNEL SETUP FAILURE
  CommonTransportChannelSetupFailure ::= SEQUENCE {
                                              {{CommonTransportChannelSetupFailure-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CommonTransportChannelSetupFailure-Extensions}}
   protocolExtensions
                                                                                                  OPTIONAL,
   . . .
CommonTransportChannelSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                   CRITICALITY ignore
                                                         TYPE
                                                                                       PRESENCE mandatory
                                                                Cause
          id-CriticalityDiagnostics CRITICALITY ignore
                                                                CriticalityDiagnostics
                                                                                       PRESENCE optional
     ID
                                                         TYPE
CommonTransportChannelSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ****************
  COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST FDD
  CommonTransportChannelReconfigurationRequestFDD ::= SEQUENCE {
                        ProtocolIE-Container
                                             {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
   protocolIEs
   protocolExtensions
                        ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}}
   . . .
CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                     CRITICALITY reject TYPE C-ID
                                                                                                 PRESENCE mandatory }
     ID id-ConfigurationGenerationID
                                                     CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                               PRESENCE mandatory } |
     ID id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD CRITICALITY reject TYPE CommonPhysicalChannelType-CTCH-ReconfRqstFDD PRESENCE
mandatory },
   . . .
CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-ReconfRqstFDD ::= CHOICE
   secondary-CCPCH-parameters
                                Secondary-CCPCHList-CTCH-ReconfRgstFDD,
   pRACH-parameters
                                PRACHList-CTCH-ReconfRqstFDD,
   cPCH-parameters
                                CPCHList-CTCH-ReconfRqstFDD,
```

```
Secondary-CCPCHList-CTCH-ReconfRgstFDD ::= SEQUENCE {
    fACH-ParametersList-CTCH-ReconfRgstFDD
                                                FACH-ParametersList-CTCH-ReconfRgstFDD OPTIONAL,
    pCH-Parameters-CTCH-ReconfRqstFDD
                                                PCH-Parameters-CTCH-ReconfRqstFDD
                                                                                         OPTIONAL,
   pICH-Parameters-CTCH-ReconfRqstFDD
                                                PICH-Parameters-CTCH-ReconfRqstFDD
                                                                                         OPTIONAL.
    iE-Extensions
                                                ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MICH-Parameters-CTCH-ReconfRqstFDD
                                                                                                                             PRESENCE optional },
                                                    CRITICALITY reject EXTENSION MICH-Parameters-CTCH-ReconfRqstFDD
    . . .
FACH-ParametersList-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-ReconfRgstFDD }}
FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                       CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                             PRESENCE mandatory }
FACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRqstFDD
FACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                            CommonTransportChannelID,
   maxFACH-Power
                                            DL-Power
                                                            OPTIONAL,
    t.oAWS
                                            ToAWS
                                                            OPTIONAL.
                                                            OPTIONAL,
    toAWE
                                            ToAWE
    iE-Extensions
                                            ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-ReconfRqstFDD }}
PCH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-ReconfRqstFDD PRESENCE mandatory }
PCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                            CommonTransportChannelID,
                                                            OPTIONAL,
    pCH-Power
                                            DL-Power
    toAWS
                                            ToAWS
                                                            OPTIONAL,
    toAWE
                                            ToAWE
                                                            OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs} }
                                                                                                                                   OPTIONAL,
PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

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PICH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRqstFDD }}
PICH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
PICH-ParametersItem-CTCH-ReconfRgstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                   CommonPhysicalChannelID,
   pICH-Power
                                   PICH-Power
                                                 OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                              OPTIONAL,
PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-Parameters-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                   CommonPhysicalChannelID,
   mICH-Power
                                   PICH-Power
                                                                                            OPTIONAL.
   iE-Extensions
                                   ProtocolExtensionContainer { { MICH-Parameters-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                            OPTIONAL.
   . . .
MICH-Parameters-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
   pRACH-ParametersList-CTCH-ReconfRqstFDD
                                          PRACH-ParametersList-CTCH-ReconfRgstFDD OPTIONAL,
   aICH-ParametersList-CTCH-ReconfRqstFDD
                                          AICH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
                                          ProtocolExtensionContainer { { PRACH-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-ParametersList-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersListIEs-CTCH-ReconfRgstFDD }}
PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   PRACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRqstFDD
PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                       CommonPhysicalChannelID,
   preambleSignatures
                                       PreambleSignatures
                                                                                                 OPTIONAL,
   allowedSlotFormatInformation
                                       AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD
                                                                                                 OPTIONAL,
   rACH-SubChannelNumbers
                                       RACH-SubChannelNumbers
                                                                                                 OPTIONAL,
   iE-Extensions
                                       ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
   . . .
```

```
PRACH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AllowedSlotFormatInformationList-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
ReconfRastFDD
AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD ::= SEQUENCE
   rACH-SlotFormat
                                         RACH-SlotFormat,
                                         ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}
AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
AICH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRgstFDD
AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   aICH-Power
                                     AICH-Power
                                                     OPTIONAL,
   iE-Extensions
                                     ProtocolExtensionContainer { { AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                        OPTIONAL,
    . . .
AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    cPCH-ParametersList-CTCH-ReconfRqstFDD
                                                 CPCH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                       OPTIONAL,
   aP-AICH-ParametersList-CTCH-ReconfRqstFDD
                                                 AP-AICH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                       OPTIONAL,
   cDCA-ICH-ParametersList-CTCH-ReconfRqstFDD
                                                 CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                       OPTIONAL,
                                                 ProtocolExtensionContainer { { CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPCH-ParametersList-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ CPCH-ParametersListIEs-CTCH-ReconfRgstFDD }}
CPCH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
```

```
{ ID id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD
                                                       CRITICALITY reject TYPE CPCH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                             PRESENCE mandatory }
CPCH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CPCH-ParametersItem-CTCH-ReconfRgstFDD
CPCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
    uL-SIR
                                    UL-SIR
                                                    OPTIONAL,
    initialDL-transmissionPower
                                    DL-Power
                                                    OPTIONAL,
  maximumDLPower
                                    DL-Power
                                                    OPTIONAL,
                                    DL-Power
   minimumDLPower
                                                    OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { { CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AP-AICH-ParametersList-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ AP-AICH-ParametersListIEs-CTCH-ReconfRgstFDD }}
AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                                PRESENCE mandatory }
AP-AICH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEOUENCE (SIZE (1..maxNrOfCPCHs)) OF AP-AICH-ParametersItem-CTCH-ReconfRgstFDD
AP-AICH-ParametersItem-CTCH-ReconfRgstFDD ::= SEOUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    aP-AICH-Power
                                        AICH-Power
                                                        OPTIONAL,
    cSICH-Power
                                        AICH-Power
                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                                   OPTIONAL,
    . . .
AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD }}
CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD
                                                          CRITICALITY reject TYPE CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE
    mandatory }
CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD
CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    cDCA-ICH-Power
                                        AICH-Power
                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                                   OPTIONAL,
```

```
CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
  *****************
CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}}
                                                                                                           OPTIONAL.
CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                              CRITICALITY reject TYPE C-ID
                                                                                         PRESENCE mandatory } |
     ID id-ConfigurationGenerationID
                                              CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                            PRESENCE mandatory } |
    PRESENCE
optional }|
     ID id-PICH-Parameters-CTCH-ReconfRqstTDD
                                              CRITICALITY reject TYPE PICH-Parameters-CTCH-ReconfRqstTDD
                                                                                                      PRESENCE optional }
     ID id-PCH-Parameters-CTCH-ReconfRqstTDD
                                              CRITICALITY reject TYPE PCH-Parameters-CTCH-ReconfRqstTDD
                                                                                                      PRESENCE optional },
   . . .
CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-FPACH-LCR-Parameters-CTCH-ReconfRgstTDD
                                                 CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-ReconfRgstTDD PRESENCE optional }
   -- Mandatory For 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
   { ID id-MICH-Parameters-CTCH-ReconfRqstTDD
                                                 CRITICALITY reject EXTENSION MICH-Parameters-CTCH-ReconfRqstTDD
                                                                                                                 PRESENCE optional },
   . . .
Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD::= SEQUENCE {
   cCTrCH-ID
                               CCTrCH-ID,
                                Secondary-CCPCHList-CTCH-ReconfRqstTDD
   secondaryCCPCHList
                                                                          OPTIONAL,
                               ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                      OPTIONAL,
   . . .
Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD
                                                               CRITICALITY reject EXTENSION Secondary-CCPCH-parameterExtendedList-CTCH-
                 PRESENCE optional }
ReconfRastTDD
   -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
   { ID id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                               CRITICALITY reject EXTENSION Secondary-CCPCH-LCR-parameterExtendedList-
CTCH-ReconfRgstTDD PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
   . . .
Secondary-CCPCHList-CTCH-ReconfRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD }}
```

```
Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
                                                        CRITICALITY reject TYPE Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
                                                                                                                             PRESENCE mandatory }
Secondary-CCPCHListIE-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRgstTDD
Secondary-CCPCHItem-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    sCCPCH-Power
                                        DL-Power
                                                        OPTIONAL,
                                        ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                             OPTIONAL,
Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PICH-Parameters-CTCH-ReconfRqstTDD
                                    ::= SEOUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    pICH-Power
                                        PICH-Power
                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                          OPTIONAL.
    . . .
PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRqstTDD
FACH-ParametersItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
                                    ToAWS
    toAWS
                                                    OPTIONAL,
    toAWE
                                    TOAWE
                                                    OPTIONAL,
                                    ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL.
FACH-ParametersItem-CTCH-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD
                                                            CRITICALITY reject
                                                                                     EXTENSION
                                                                                                DL-Power
                                                                                                              PRESENCE
                                                                                                                          optional },
    -- Applicable to 1.28Mcps TDD only
PCH-Parameters-CTCH-ReconfRgstTDD ::= SEOUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
    toAWS
                                    ToAWS
                                                    OPTIONAL,
                                                    OPTIONAL,
    toAWE
                                    TOAWE
    iE-Extensions
                                    ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} } 
                                                                                                                    OPTIONAL,
    . . .
PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PCH-Power-LCR-CTCH-ReconfRqstTDD
                                                    CRITICALITY reject
                                                                             EXTENSION DL-Power
                                                                                                   PRESENCE optional },
```

```
... -- Applicable to 1.28Mcps TDD only
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
   commonPhysicalChannelId
                                 CommonPhysicalChannelID,
   fPACHPower
                                 FPACH-Power
                                                OPTIONAL,
   iE-Extensions
                                 ProtocolExtensionContainer { { FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                OPTIONAL.
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   mICH-Power
                                     PICH-Power
                                                                                                OPTIONAL,
   iE-Extensions
                                     ProtocolExtensionContainer { { MICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                OPTIONAL,
MICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-parameterExtendedList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsinExt)) OF Secondary-CCPCHItem-CTCH-ReconfRqstTDD
   -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
Secondary-CCPCH-LCR-parameterExtendedList-CTCH-ReconfRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfSCCPCHsLCRinExt)) OF Secondary-CCPCHItem-CTCH-
   -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
__ ********************
  COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
  ******************
CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
                                               {{CommonTransportChannelReconfigurationResponse-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                         ProtocolExtensionContainer {{CommonTransportChannelReconfigurationResponse-Extensions}}
                                                                                                                OPTIONAL,
   . . .
CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
          id-CriticalityDiagnostics
   { ID
                                        CRITICALITY
                                                       ignore
                                                                      TYPE
                                                                              CriticalityDiagnostics PRESENCE optional },
CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
-- COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
CommonTransportChannelReconfigurationFailure ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{CommonTransportChannelReconfigurationFailure-IEs}},
                         ProtocolExtensionContainer {{CommonTransportChannelReconfigurationFailure-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
CommonTransportChannelReconfigurationFailure-IES NBAP-PROTOCOL-IES ::= {
                                       CRITICALITY ignore
                                                                 TYPE
                                                                                           PRESENCE mandatory }
                                                                        Cause
          id-CriticalityDiagnostics
   { ID
                                       CRITICALITY ignore
                                                                 TYPE
                                                                        CriticalityDiagnostics
                                                                                                PRESENCE optional },
CommonTransportChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   COMMON TRANSPORT CHANNEL DELETION REQUEST
  CommonTransportChannelDeletionRequest ::= SEQUENCE
   protocolIEs
                            ProtocolIE-Container
                                                   {{CommonTransportChannelDeletionRequest-IEs}},
                            ProtocolExtensionContainer {{CommonTransportChannelDeletionRequest-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
CommonTransportChannelDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
          id-C-ID
                                                                                        PRESENCE mandatory |
                                           CRITICALITY reject
                                                                 TYPE
                                                                        C-ID
          id-CommonPhysicalChannelID
     ID
                                           CRITICALITY reject
                                                                 TYPE
                                                                        CommonPhysicalChannelID PRESENCE mandatory}
    ID
          id-ConfigurationGenerationID
                                           CRITICALITY reject
                                                                 TYPE
                                                                        ConfigurationGenerationID PRESENCE mandatory },
CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- COMMON TRANSPORT CHANNEL DELETION RESPONSE
  ******************
CommonTransportChannelDeletionResponse ::= SEQUENCE
                                               {{CommonTransportChannelDeletionResponse-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                         ProtocolExtensionContainer {{CommonTransportChannelDeletionResponse-Extensions}}
                                                                                                           OPTIONAL,
```

```
CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-CriticalityDiagnostics
                                      CRITICALITY
                                                               TYPE
                                                                      CriticalityDiagnostics
                                                                                             PRESENCE optional },
CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     -- BLOCK RESOURCE REQUEST
__ ********************
BlockResourceRequest ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                {{BlockResourceRequest-IEs}},
                        ProtocolExtensionContainer {{BlockResourceRequest-Extensions}}
   protocolExtensions
                                                                                                OPTIONAL,
BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
                                                                                           PRESENCE mandatory
     ID id-C-ID
                                          CRITICALITY reject
     TD
         id-BlockingPriorityIndicator
                                          CRITICALITY reject
                                                               TYPE
                                                                      BlockingPriorityIndicator
                                                                                                  PRESENCE mandatory } |
   { ID id-ShutdownTimer
                                          CRITICALITY reject
                                                               TYPE
                                                                      ShutdownTimer
                                                                                           PRESENCE conditional },
   -- The IE shall be present if the Blocking Priority Indicator IE indicates "Normal Priority"--
BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- BLOCK RESOURCE RESPONSE
__ ********************************
BlockResourceResponse ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                    {{BlockResourceResponse-IEs}},
                           ProtocolExtensionContainer {{BlockResourceResponse-Extensions}}
   protocolExtensions
                                                                                        OPTIONAL,
BlockResourceResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-CriticalityDiagnostics
                                     CRITICALITY
                                                    ignore
                                                               TYPE
                                                                      CriticalityDiagnostics
                                                                                             PRESENCE optional },
   . . .
BlockResourceResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
-- BLOCK RESOURCE FAILURE
__ **********************
BlockResourceFailure ::= SEOUENCE {
   protocolIEs
               ProtocolIE-Container
                                               {{BlockResourceFailure-IEs}},
                     ProtocolExtensionContainer {{BlockResourceFailure-Extensions}}
   protocolExtensions
                                                                                   OPTIONAL,
BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
         id-Cause
                                                                                          PRESENCE mandatory
                                      CRITICALITY
                                                    ignore
                                                              TYPE
         id-CriticalityDiagnostics
    ID
                                      CRITICALITY
                                                    ignore
                                                              TYPE
                                                                     CriticalityDiagnostics
                                                                                            PRESENCE optional },
   . . .
BlockResourceFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    *****************
-- UNBLOCK RESOURCE INDICATION
     ******************
UnblockResourceIndication ::= SEQUENCE {
                                             {{UnblockResourceIndication-IEs}},
   protocolIEs
                ProtocolIE-Container
                       ProtocolExtensionContainer {{UnblockResourceIndication-Extensions}}
   protocolExtensions
                                                                                       OPTIONAL,
   . . .
UnblockResourceIndication-IES NBAP-PROTOCOL-IES ::= {
   { ID
         id-C-ID
                       CRITICALITY
                                      ignore
                                                TYPE C-ID
                                                                  PRESENCE
                                                                            mandatory},
   . . .
UnblockResourceIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- AUDIT REQUIRED INDICATION
  *****************
AuditRequiredIndication ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                             {{AuditRequiredIndication-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{AuditRequiredIndication-Extensions}}
                                                                                       OPTIONAL,
   . . .
```

```
AuditRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
AuditRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
        ****************
-- AUDIT REQUEST
__ *********************
AuditRequest ::= SEOUENCE {
   protocolIEs
                                                 {{AuditRequest-IEs}},
                            ProtocolIE-Container
                            ProtocolExtensionContainer {{AuditRequest-Extensions}}
   protocolExtensions
                                                                                 OPTIONAL,
AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
                                                                reject TYPE Start-Of-Audit-Sequence-Indicator PRESENCE mandatory },
   { ID
          id-Start-Of-Audit-Sequence-Indicator
                                                 CRITICALITY
AuditReguest-Extensions NBAP-PROTOCOL-EXTENSION ::= -
  -- AUDIT RESPONSE
  AuditResponse ::= SEQUENCE {
                                                 {{AuditResponse-IEs}},
   protocolIEs
                            ProtocolIE-Container
   protocolExtensions
                            ProtocolExtensionContainer {{AuditResponse-Extensions}}
                                                                                     OPTIONAL,
AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
     ID id-End-Of-Audit-Sequence-Indicator
                                                 CRITICALITY ignore TYPE End-Of-Audit-Sequence-Indicator
                                                                                                           PRESENCE mandatory } |
     ID id-Cell-InformationList-AuditRsp
                                                 CRITICALITY ignore TYPE Cell-InformationList-AuditRsp
                                                                                                           PRESENCE optional } |
    { ID id-CCP-InformationList-AuditRsp
                                                 CRITICALITY ignore TYPE CCP-InformationList-AuditRsp
                                                                                                         PRESENCE optional } |
   -- CCP (Communication Control Port) --
     ID id-Local-Cell-InformationList-AuditRsp
                                                 CRITICALITY ignore TYPE Local-Cell-InformationList-AuditRsp
                                                                                                              PRESENCE optional }
     ID id-Local-Cell-Group-InformationList-AuditRsp
                                                 CRITICALITY ignore TYPE Local-Cell-Group-InformationList-AuditRsp PRESENCE optional }
    { ID id-CriticalityDiagnostics
                                                 CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                   PRESENCE optional },
   . . .
```

```
AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList-AuditRsp CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList-AuditRsp
    PRESENCE optional }.
Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}
Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
                                                    CRITICALITY ignore
    { ID
           id-Cell-InformationItem-AuditRsp
                                                                            TYPE Cell-InformationItem-AuditRsp
                                                                                                                       PRESENCE optional }
Cell-InformationItem-AuditRsp ::= SEOUENCE {
    c-ID
                                            C-ID.
    configurationGenerationID
                                            ConfigurationGenerationID,
    resourceOperationalState
                                            ResourceOperationalState,
    availabilityStatus
                                            AvailabilityStatus,
    local-Cell-ID
                                            Local-Cell-ID,
    primary-SCH-Information
                                            P-SCH-Information-AuditRsp
                                                                                         OPTIONAL,
    secondary-SCH-Information
                                            S-SCH-Information-AuditRsp
                                                                                         OPTIONAL,
    primary-CPICH-Information
                                            P-CPICH-Information-AuditRsp
                                                                                         OPTIONAL,
    secondary-CPICH-InformationList
                                            S-CPICH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    primary-CCPCH-Information
                                            P-CCPCH-Information-AuditRsp
                                                                                         OPTIONAL,
    bCH-Information
                                            BCH-Information-AuditRsp
                                                                                         OPTIONAL,
    secondary-CCPCH-InformationList
                                            S-CCPCH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    pCH-Information
                                            PCH-Information-AuditRsp
                                                                                         OPTIONAL,
                                            PICH-Information-AuditRsp
    pICH-Information
                                                                                         OPTIONAL,
                                            FACH-InformationList-AuditRsp
    fACH-InformationList
                                                                                         OPTIONAL,
    pRACH-InformationList
                                            PRACH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    rACH-InformationList
                                            RACH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    aICH-InformationList
                                            AICH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    pCPCH-InformationList
                                            PCPCH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    cPCH-InformationList
                                            CPCH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    aP-AICH-InformationList
                                            AP-AICH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    cDCA-ICH-InformationList
                                            CDCA-ICH-InformationList-AuditRsp
                                                                                         OPTIONAL,
    sCH-Information
                                            SCH-Information-AuditRsp
                                                                                        OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer
                                                                        { { Cell-InformationItem-AuditRsp-ExtIEs} }
                                                                                                                       OPTIONAL,
Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-AuditRsp
                                                    CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-AuditRsp
                                                                                                                              PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-DwPCH-LCR-InformationList-AuditRsp
                                                    CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
      ID id-HSDSCH-Resources-Information-AuditRsp
                                                    CRITICALITY ignore EXTENSION HS-DSCH-Resources-Information-AuditRsp
                                                                                                                              PRESENCE optional
      ID id-MICH-Information-AuditRsp
                                                    CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information PRESENCE optional
     ID id-S-CCPCH-InformationListExt-AuditRsp
                                                    CRITICALITY ignore EXTENSION S-CCPCH-InformationListExt-AuditRsp
                                                                                                                              PRESENCE optional }
    -- Applicable to 3.84Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the cell.
                                                                                                                             PRESENCE optional }
    { ID id-S-CCPCH-LCR-InformationListExt-AuditRsp CRITICALITY ignore EXTENSION S-CCPCH-LCR-InformationListExt-AuditRsp
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the cell.
    { ID id-E-DCH-Resources-Information-AuditRsp
                                                    CRITICALITY ignore EXTENSION E-DCH-Resources-Information-AuditRsp
                                                                                                                              PRESENCE optional },
```

```
P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}
P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}
S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}
P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-P-CPICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}
S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-S-CPICH-Information CRITICALITY ignore
                                                TYPE Common-PhysicalChannel-Status-Information
                                                                                            PRESENCE mandatory }
P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}
P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-P-CCPCH-Information CRITICALITY ignore
                                                TYPE Common-PhysicalChannel-Status-Information
                                                                                            PRESENCE mandatory }
BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}
BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-BCH-Information CRITICALITY ignore
                                            TYPE Common-TransportChannel-Status-Information
                                                                                         PRESENCE mandatory }
S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}
S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-S-CCPCH-Information CRITICALITY ignore
                                              TYPE Common-PhysicalChannel-Status-Information
                                                                                            PRESENCE mandatory }
PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}
PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-PCH-Information CRITICALITY ignore
                                            TYPE Common-TransportChannel-Status-Information
                                                                                         PRESENCE mandatory }
PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}
PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

```
FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}
FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}
PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}
RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
AICH-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}
AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-AICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                  PRESENCE mandatory }
PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}
PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-PCPCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                  PRESENCE optional }
CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}
CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE optional }
AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}
AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-AP-AICH-Information CRITICALITY ignore
                                            TYPE Common-PhysicalChannel-Status-Information
                                                                                    PRESENCE mandatory }
CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}
CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}
SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

```
CCP-InformationList-AuditRsp ::=SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}
CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    {ID id-CCP-InformationItem-AuditRsp
                                                CRITICALITY
                                                                ignore
                                                                                TYPE
                                                                                        CCP-InformationItem-AuditRsp
                                                                                                                             PRESENCE mandatory }
CCP-InformationItem-AuditRsp ::= SEQUENCE {
    communicationControlPortID
                                        CommunicationControlPortID,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
                                        ProtocolExtensionContainer {{ CCP-InformationItem-AuditRsp-ExtIEs }}
    iE-Extensions
                                                                                                                OPTIONAL,
    . . .
CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FPACH-LCR-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}
FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-Information-AuditRsp CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                                    PRESENCE mandatory }
HS-DSCH-Resources-Information-AuditRsp ::= SEQUENCE {
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
    iE-Extensions
                                        ProtocolExtensionContainer {{ HS-DSCH-Resources-Information-AuditRsp-ExtIEs }}
                                                                                                                             OPTIONAL,
HS-DSCH-Resources-Information-AuditRsp-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
S-CCPCH-InformationListExt-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCellinExt)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
AuditRsp }}
S-CCPCH-LCR-InformationListExt-AuditRsp ::= SEOUENCE (SIZE (1..maxSCCPCHCellinExtLCR)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
AuditRsp }}
E-DCH-Resources-Information-AuditRsp ::= SEQUENCE {
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
                                        ProtocolExtensionContainer {{ E-DCH-Resources-Information-AuditRsp-ExtIEs }}
    iE-Extensions
                                                                                                                          OPTIONAL,
E-DCH-Resources-Information-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Local-Cell-InformationList-AuditRsp ::=SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-
AuditRsp }}
```

```
Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-AuditRsp
                                                 CRITICALITY ignore TYPE Local-Cell-InformationItem-AuditRsp PRESENCE mandatory}
Local-Cell-InformationItem-AuditRsp ::= SEOUENCE {
   local-Cell-ID
                                              Local-Cell-ID,
    dl-or-global-capacityCredit
                                              DL-or-Global-CapacityCredit,
    ul-capacityCredit
                                              UL-CapacityCredit
                                                                                                         OPTIONAL.
    commonChannelsCapacityConsumptionLaw
                                              CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                              DedicatedChannelsCapacityConsumptionLaw,
    maximumDL-PowerCapability
                                              MaximumDL-PowerCapability
                                                                                                         OPTIONAL,
   minSpreadingFactor
                                              MinSpreadingFactor
                                                                                                         OPTIONAL,
   minimumDL-PowerCapability
                                              MinimumDL-PowerCapability
                                                                                                         OPTIONAL,
    local-Cell-Group-ID
                                              Local-Cell-ID
                                                                                                         OPTIONAL,
    iE-Extensions
                                              ProtocolExtensionContainer {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}
                                                                                                                          OPTIONAL,
    . . .
Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     TD
           id-ReferenceClockAvailability
                                              CRITICALITY ignore
                                                                         EXTENSION ReferenceClockAvailability
                                                                                                                 PRESENCE optional } |
     ID
           id-Power-Local-Cell-Group-ID
                                              CRITICALITY ignore
                                                                         EXTENSION Local-Cell-ID
                                                                                                      PRESENCE optional } |
     ID
           id-HSDPA-Capability
                                              CRITICALITY ignore
                                                                         EXTENSION HSDPA-Capability
                                                                                                         PRESENCE optional } |
           id-E-DCH-Capability
     ID
                                              CRITICALITY ignore
                                                                         EXTENSION E-DCH-Capability
                                                                                                         PRESENCE optional },
Local-Cell-Group-InformationList-AuditRsp
                                           ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE-AuditRsp }}
Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
   local-Cell-Group-ID
                                              Local-Cell-ID,
    dl-or-global-capacityCredit
                                              DL-or-Global-CapacityCredit,
    ul-capacityCredit
                                              UL-CapacityCredit
                                                                                    OPTIONAL,
    commonChannelsCapacityConsumptionLaw
                                              CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                              DedicatedChannelsCapacityConsumptionLaw,
                                              ProtocolExtensionContainer {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
    iE-Extensions
                                                                                                                                OPTIONAL,
    . . .
Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Power-Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-
Group-InformationItemIE-AuditRsp }}
Power-Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::=
           id-Power-Local-Cell-Group-InformationItem-AuditRsp
                                                                     CRITICALITY
                                                                                                TYPE Power-Local-Cell-Group-InformationItem-
    { ID
                                                                                    ignore
AuditRsp
               PRESENCE
                          mandatory}
```

```
Power-Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
   power-Local-Cell-Group-ID
                                          Local-Cell-ID,
   maximumDL-PowerCapability
                                          MaximumDL-PowerCapability,
                                          ProtocolExtensionContainer {{ Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
   iE-Extensions
   OPTIONAL,
   . . .
Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- AUDIT FAILURE
  AuditFailure ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{AuditFailure-IEs}},
                        ProtocolExtensionContainer {{AuditFailure-Extensions}}
   protocolExtensions
                                                                                 OPTIONAL,
AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                          CRITICALITY
                                                         ignore
                                                                       TYPE
                                                                              Cause
                                                                                                 PRESENCE mandatory }
          id-CriticalityDiagnostics
   { ID
                                          CRITICALITY
                                                        ignore
                                                                       TYPE
                                                                              CriticalityDiagnostics
                                                                                                      PRESENCE optional },
AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   -- COMMON MEASUREMENT INITIATION REQUEST
__ ********************************
CommonMeasurementInitiationRequest ::= SEQUENCE {
                                              {{CommonMeasurementInitiationRequest-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}
   protocolExtensions
CommonMeasurementInitiationRequest-IEs NBAP-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 } |
     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 },
   . . .
CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-CommonMeasurementAccuracy
                                                 CRITICALITY reject
                                                                        EXTENSION CommonMeasurementAccuracy
                                                                                                           PRESENCE
optional}|
    ID
         id-MeasurementRecoveryBehavior
                                                 CRITICALITY ignore
                                                                        EXTENSION MeasurementRecoveryBehavior
                                                                                                           PRESENCE optional
   . . .
CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
   cell
                             Cell-CM-Rast,
   rACH
                             RACH-CM-Rast,
   cPCH
                             CPCH-CM-Rast,
   extension-CommonMeasurementObjectType-CM-Rgst
                                              Extension-CommonMeasurementObjectType-CM-Rgst
Extension-CommonMeasurementObjectType-CM-Rqst ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RqstIE }}
Extension-CommonMeasurementObjectType-CM-RgstIE NBAP-PROTOCOL-IES ::={
   Cell-CM-Rast ::= SEQUENCE {
   c-ID
                             C-ID,
   timeSlot
                             TimeSlot
                                       OPTIONAL, -- Applicable to 3.84Mcps TDD only
                             ProtocolExtensionContainer { { CellItem-CM-Rgst-ExtIEs} }
   iE-Extensions
                                                                                OPTIONAL,
CellItem-CM-Rast-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TimeSlotLCR-CM-Rqst
                                           CRITICALITY reject EXTENSION TimeSlotLCR
                                                                                     PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only
   RACH-CM-Rgst ::= SEQUENCE {
                             C-ID,
   c-ID
   commonTransportChannelID
                             CommonTransportChannelID,
                             iE-Extensions
                                                                                OPTIONAL,
RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPCH-CM-Rqst ::= SEQUENCE {
   c-ID
                             C-ID,
```

```
commonTransportChannelID
                                  CommonTransportChannelID,
    spreadingfactor
                                  MinUL-ChannelisationCodeLength
                                                                     OPTIONAL.
   iE-Extensions
                                  OPTIONAL.
CPCHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerLocalCellGroup-CM-Rqst ::= SEOUENCE {
   powerLocalCellGroupID
                                  Local-Cell-ID,
                                  ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rqst-ExtIEs }} OPTIONAL,
   iE-Extensions
PowerLocalCellGroup-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT INITIATION RESPONSE
CommonMeasurementInitiationResponse ::= SEQUENCE
                                                  {{CommonMeasurementInitiationResponse-IEs}},
   protocolIEs
                          ProtocolIE-Container
                          ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                                  CRITICALITY ignore
                                                                        TYPE MeasurementID
                                                                                                 PRESENCE mandatory }
     ID id-CommonMeasurementObjectType-CM-Rsp
                                                  CRITICALITY ignore
                                                                                                                  PRESENCE optional }|
                                                                        TYPE CommonMeasurementObjectType-CM-Rsp
     ID id-SFN
                                                  CRITICALITY ignore
                                                                        TYPE SFN
                                                                                                 PRESENCE optional } |
    { ID id-CriticalityDiagnostics
                                                  CRITICALITY ignore
                                                                        TYPE CriticalityDiagnostics PRESENCE optional },
CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-CommonMeasurementAccuracy
                                          CRITICALITY ignore
                                                                 EXTENSION CommonMeasurementAccuracy PRESENCE optional}
           id-MeasurementRecoverySupportIndicator
                                                     CRITICALITY ignore
                                                                             EXTENSION MeasurementRecoverySupportIndicator PRESENCE optional
    },
CommonMeasurementObjectType-CM-Rsp ::= CHOICE
   cell
                              Cell-CM-Rsp,
   rACH
                              RACH-CM-Rsp,
   CPCH
                              CPCH-CM-Rsp,
    extension-CommonMeasurementObjectType-CM-Rsp
                                                      Extension-CommonMeasurementObjectType-CM-Rsp
```

```
::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RspIE }}
Extension-CommonMeasurementObjectType-CM-Rsp
Extension-CommonMeasurementObjectType-CM-RspIE NBAP-PROTOCOL-IES ::={
   { ID id-Power-Local-Cell-Group-choice-CM-Rsp
                                               CRITICALITY ignore
                                                                       TYPE PowerLocalCellGroup-CM-Rsp PRESENCE mandatory }
Cell-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                                  CommonMeasurementValue,
   iE-Extensions
                                  ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs} }
                                                                                            OPTIONAL,
   . . .
Cellitem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-CM-Rsp ::= SEOUENCE {
   commonMeasurementValue
                                 CommonMeasurementValue,
   iE-Extensions
                                  ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs} }
                                                                                            OPTIONAL,
RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
CPCH-CM-Rsp ::= SEOUENCE {
   commonMeasurementValue
                                 CommonMeasurementValue,
                                  ProtocolExtensionContainer { { CPCHItem-CM-Rsp-ExtIEs} }
   iE-Extensions
                                                                                            OPTIONAL,
CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerLocalCellGroup-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                                 CommonMeasurementValue,
                                 ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rsp-ExtIEs}}
   iE-Extensions
                                                                                                    OPTIONAL,
   . . .
PowerLocalCellGroup-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- COMMON MEASUREMENT INITIATION FAILURE
  *************************
CommonMeasurementInitiationFailure ::= SEQUENCE {
                                                 {{CommonMeasurementInitiationFailure-IEs}},
   protocolIEs
                          ProtocolIE-Container
```

```
ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}}
                                                                                                           OPTIONAL,
   protocolExtensions
CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
           id-MeasurementID
                                           CRITICALITY
                                                           ignore
                                                                          TYPE
                                                                                  MeasurementID
                                                                                                  PRESENCE mandatory
     TD
           id-Cause
                                           CRITICALITY
                                                          ignore
                                                                          TYPE
                                                                                  Cause
                                                                                                  PRESENCE mandatory
     ID
           id-CriticalityDiagnostics
                                           CRITICALITY
                                                           ignore
                                                                          TYPE
                                                                                  CriticalityDiagnostics
                                                                                                           PRESENCE optional },
CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT REPORT
  ******************
CommonMeasurementReport ::= SEQUENCE {
                                                  {{CommonMeasurementReport-IEs}},
   protocolIEs
                           ProtocolIE-Container
   protocolExtensions
                           ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}
                                                                                               OPTIONAL,
CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                                   CRITICALITY ignore
                                                                          TYPE MeasurementID
                                                                                                     PRESENCE mandatory
     ID id-CommonMeasurementObjectType-CM-Rprt
                                                   CRITICALITY ignore
                                                                          TYPE CommonMeasurementObjectType-CM-Rprt
                                                                                                                       PRESENCE mandatory
     ID id-SFN
                                                   CRITICALITY ignore
                                                                          TYPE SFN
                                                                                                     PRESENCE optional },
CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID
           id-MeasurementRecoveryReportingIndicator
                                                          CRITICALITY ignore
                                                                                  EXTENSION MeasurementRecoveryReportingIndicator
                                                                                                                                     PRESENCE
optional },
    . . .
CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
   cell
                                   Cell-CM-Rprt,
   rACH
                                   RACH-CM-Rprt,
   cPCH
                                   CPCH-CM-Rprt,
    extension-CommonMeasurementObjectType-CM-Rprt
                                                      Extension-CommonMeasurementObjectType-CM-Rprt
Extension-CommonMeasurementObjectType-CM-Rprt ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RprtIE }}
Extension-CommonMeasurementObjectType-CM-RprtIE NBAP-PROTOCOL-IES ::={
     ID id-Power-Local-Cell-Group-choice-CM-Rprt CRITICALITY ignore
                                                                          TYPE PowerLocalCellGroup-CM-Rprt PRESENCE mandatory }
```

```
Cell-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
   iE-Extensions
                                ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}
                                                                                        OPTIONAL.
CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
   iE-Extensions
                                OPTIONAL,
RACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPCH-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation.
                                ProtocolExtensionContainer {{    CPCHItem-CM-Rprt-ExtIEs }}
   iE-Extensions
                                                                                          OPTIONAL,
   . . .
CPCHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerLocalCellGroup-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
                                   ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rprt-ExtIEs}} OPTIONAL,
   iE-Extensions
PowerLocalCellGroup-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    **************
-- COMMON MEASUREMENT TERMINATION REQUEST
  *****************
CommonMeasurementTerminationRequest ::= SEQUENCE {
                                              {{CommonMeasurementTerminationRequest-IEs}},
   protocolIEs
                         ProtocolIE-Container
                         ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                  OPTIONAL,
```

```
CommonMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-MeasurementID
                                   CRITICALITY
                                                                  TYPE
                                                                                          PRESENCE mandatory },
                                                 ignore
                                                                         Measurement.ID
   . . .
CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT FAILURE INDICATION
   CommonMeasurementFailureIndication ::= SEQUENCE {
                                             {{CommonMeasurementFailureIndication-IEs}},
   protocolIEs
                        ProtocolIE-Container
                            ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                       OPTIONAL,
   . . .
CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
         id-MeasurementID
                                  CRITICALITY ignore
                                                           TYPE
                                                                  MeasurementID
                                                                                     PRESENCE mandatory
                                  CRITICALITY ignore
    ID
          id-Cause
                                                           TYPE
                                                                  Cause
                                                                                     PRESENCE mandatory
CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    -- CELL SETUP REQUEST FDD
  CellSetupRequestFDD ::= SEQUENCE {
                                            {{CellSetupRequestFDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer {{CellSetupRequestFDD-Extensions}}
                                                                                    OPTIONAL,
CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Local-Cell-ID
                                                                                                     PRESENCE mandatory } |
                                                        CRITICALITY reject TYPE Local-Cell-ID
                                                                                               PRESENCE mandatory } |
     ID id-C-ID
                                                        CRITICALITY reject TYPE C-ID
    ID id-ConfigurationGenerationID
                                                        CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                               PRESENCE mandatory
} |
     ID id-T-Cell
                                                        CRITICALITY reject TYPE T-Cell
                                                                                                PRESENCE mandatory }
     ID id-UARFCNforNu
                                                        CRITICALITY reject TYPE UARFON
                                                                                                PRESENCE mandatory }
     ID id-UARFCNforNd
                                                        CRITICALITY reject TYPE UARFON
                                                                                                PRESENCE mandatory }
     ID id-MaximumTransmissionPower
                                                        CRITICALITY reject TYPE MaximumTransmissionPower
                                                                                                               PRESENCE mandatory
} |
   { ID id-Closed-Loop-Timing-Adjustment-Mode
                                                        CRITICALITY reject TYPE Closedlooptimingadjustmentmode
                                                                                                               PRESENCE optional } |
```

```
ID id-PrimaryScramblingCode
                                                                CRITICALITY reject TYPE PrimaryScramblingCode
                                                                                                                              PRESENCE mandatory }
     ID id-Synchronisation-Configuration-Cell-SetupRgst
                                                                CRITICALITY reject TYPE Synchronisation-Configuration-Cell-SetupRqst
                                                                                                                                            PRESENCE
    mandatory } |
     ID id-DL-TPC-Pattern01Count
                                                                CRITICALITY reject TYPE DL-TPC-Pattern01Count
                                                                                                                             PRESENCE mandatory } |
     ID id-PrimarySCH-Information-Cell-SetupRqstFDD
                                                                CRITICALITY reject TYPE PrimarySCH-Information-Cell-SetupRqstFDD
                                                                                                                                            PRESENCE
    mandatory } |
    { ID id-SecondarySCH-Information-Cell-SetupRgstFDD
                                                                CRITICALITY reject TYPE SecondarySCH-Information-Cell-SetupRqstFDD
                                                                                                                                            PRESENCE
mandatory }|
    { ID id-PrimaryCPICH-Information-Cell-SetupRqstFDD
                                                                CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-SetupRqstFDD
                                                                                                                                            PRESENCE
    mandatory } |
    { ID id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD
                                                                CRITICALITY reject TYPE SecondaryCPICH-InformationList-Cell-SetupRqstFDD
                                                                                                                                            PRESENCE
    optional }|
    { ID id-PrimaryCCPCH-Information-Cell-SetupRqstFDD
                                                                CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-SetupRqstFDD
                                                                                                                                            PRESENCE
    mandatory } |
    { ID id-Limited-power-increase-information-Cell-SetupRqstFDD
                                                                    CRITICALITY reject TYPE Limited-power-increase-information-Cell-SetupRqstFDD
        PRESENCE mandatory },
    . . .
CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-IPDLParameter-Information-Cell-SetupRqstFDD
                                                            CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-SetupRqstFDD
    PRESENCE optional }
    { ID id-PDSCH-Information-Cell-SetupRqstFDD
                                                            CRITICALITY reject EXTENSION PDSCH-Information-Cell-SetupRqstFDD
    PRESENCE optional } |
    { ID id-CellPortion-InformationList-Cell-SetupRqstFDD
                                                            CRITICALITY reject EXTENSION CellPortion-InformationList-Cell-SetupRqstFDD
    PRESENCE optional },
    . . .
Synchronisation-Configuration-Cell-SetupRgst ::= SEQUENCE
    n-INSYNC-IND
                            N-INSYNC-IND,
   n-OUTSYNC-IND
                            N-OUTSYNC-IND,
                            T-RLFAILURE,
    t-RLFAILURE
                            ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-SetupRqst-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
    . . .
Synchronisation-Configuration-Cell-SetupRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE
                                            CommonPhysicalChannelID,
    commonPhysicalChannelID
    primarySCH-Power
                                            DL-Power,
    tSTD-Indicator
                                            TSTD-Indicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs} }
                                                                                                                                   OPTIONAL,
PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE
```

```
commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    secondarySCH-Power
                                            DL-Power.
    tSTD-Indicator
                                            TSTD-Indicator.
    iE-Extensions
                                            ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} }
                                                                                                                                   OPTIONAL.
SecondarySCH-Information-Cell-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    primaryCPICH-Power
                                            PrimaryCPICH-Power,
    transmitDiversityIndicator
                                            TransmitDiversityIndicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs} }
                                                                                                                                   OPTIONAL.
    . . .
PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondaryCPICH-InformationList-Cell-SetupRgstFDD ::= SEOUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container { SecondaryCPICH-
InformationItemIE-Cell-SetupRqstFDD }}
SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
          id-SecondaryCPICH-InformationItem-Cell-SetupRgstFDD
                                                                    CRITICALITY
                                                                                    reject
                                                                                                  TYPE SecondaryCPICH-InformationItem-Cell-
                    PRESENCE
SetupRastFDD
                                mandatory}
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    dl-ScramblingCode
                                            DL-ScramblingCode,
                                            FDD-DL-ChannelisationCodeNumber,
    fDD-DL-ChannelisationCodeNumber
    secondaryCPICH-Power
                                            DL-Power,
    transmitDiversityIndicator
                                            TransmitDiversityIndicator,
                                            ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
   bCH-information
                                            BCH-Information-Cell-SetupRqstFDD,
    sTTD-Indicator
                                            STTD-Indicator,
                                            ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                         CommonTransportChannelID,
   bCH-Power
                                         DL-Power,
                                         ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL,
BCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Limited-power-increase-information-Cell-SetupRqstFDD ::= SEQUENCE {
   powerRaiseLimit
                                        PowerRaiseLimit,
   dLPowerAveragingWindowSize
                                         DLPowerAveragingWindowSize,
                                         ProtocolExtensionContainer { { Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
IPDLParameter-Information-Cell-SetupRqstFDD::= SEQUENCE {
   iPDL-FDD-Parameters
                                            IPDL-FDD-Parameters,
   iPDL-Indicator
                                            IPDL-Indicator,
                                         ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                            OPTIONAL,
   . . .
IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-Information-Cell-SetupRgstFDD ::= SEQUENCE
   maximum-PDSCH-Power
                         Maximum-PDSCH-Power,
   iE-Extensions
                          ProtocolExtensionContainer { { PDSCH-Information-Cell-SetupRgstFDD-ExtIEs} }
                                                                                                      OPTIONAL,
PDSCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
CellPortion-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF ProtocolIE-Single-Container{{ CellPortion-
InformationItemIE-Cell-SetupRqstFDD }}
CellPortion-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE
              mandatory}
```

```
CellPortion-InformationItem-Cell-SetupRqstFDD::= SEOUENCE {
    cellPortionID
                                          CellPortionID.
   associatedSecondaryCPICH
                                          CommonPhysicalChannelID,
   iE-Extensions
                                          CellPortion-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  CELL SETUP REQUEST TDD
CellSetupRequestTDD ::= SEQUENCE {
                                                 {{CellSetupRequestTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}
                                                                                            OPTIONAL.
CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Local-Cell-ID
                                                          CRITICALITY reject TYPE Local-Cell-ID
                                                                                                            PRESENCE mandatory } |
     ID id-C-ID
                                                                                                         PRESENCE mandatory } |
                                                          CRITICALITY reject TYPE C-ID
     ID id-ConfigurationGenerationID
                                                          CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                        PRESENCE mandatory } |
     ID id-UARFCNforNt
                                                          CRITICALITY reject TYPE UARFON
                                                                                                         PRESENCE mandatory } |
     ID id-CellParameterID
                                                                                                            PRESENCE mandatory } |
                                                          CRITICALITY reject TYPE CellParameterID
     ID id-MaximumTransmissionPower
                                                          CRITICALITY reject TYPE MaximumTransmissionPower
                                                                                                                     PRESENCE mandatory }
     ID id-TransmissionDiversityApplied
                                                          CRITICALITY reject TYPE TransmissionDiversityApplied
                                                                                                                           PRESENCE mandatory
} |
     ID id-SyncCase
                                                          CRITICALITY reject TYPE SyncCase
                                                                                                         PRESENCE mandatory }
     ID id-Synchronisation-Configuration-Cell-SetupRqst
                                                          CRITICALITY reject TYPE Synchronisation-Configuration-Cell-SetupRqst PRESENCE
mandatory }
                                                                                                            PRESENCE mandatory } -- This IE
     ID id-DPCHConstant
                                                          CRITICALITY reject TYPE ConstantValue
shall be ignored by the Node B.
    { ID id-PUSCHConstant
                                                          CRITICALITY reject TYPE ConstantValue
                                                                                                            PRESENCE mandatory } -- This IE
shall be ignored by the Node B.
    { ID id-PRACHConstant
                                                                                                            PRESENCE mandatory } -- This IE
                                                          CRITICALITY reject TYPE ConstantValue
shall be ignored by the Node B.
     ID id-TimingAdvanceApplied
                                                          CRITICALITY reject TYPE TimingAdvanceApplied
                                                                                                                  PRESENCE mandatory } |
    { ID id-SCH-Information-Cell-SetupRqstTDD
                                                          CRITICALITY reject TYPE SCH-Information-Cell-SetupRqstTDD
                                                                                                                           PRESENCE optional } |
    -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
   { ID id-PCCPCH-Information-Cell-SetupRqstTDD
                                                          CRITICALITY reject TYPE PCCPCH-Information-Cell-SetupRqstTDD
                                                                                                                           PRESENCE optional } |
    -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
    { ID id-TimeSlotConfigurationList-Cell-SetupRgstTDD
                                                          CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-SetupRqstTDD PRESENCE optional
}, -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
    . . .
CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD
                                                            CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD
    PRESENCE optional } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID id-PCCPCH-LCR-Information-Cell-SetupRgstTDD
                                                            CRITICALITY reject EXTENSION PCCPCH-LCR-Information-Cell-SetupRgstTDD
    PRESENCE optional }
                          -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID id-DwPCH-LCR-Information-Cell-SetupRgstTDD
                                                            CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-SetupRgstTDD
    PRESENCE optional } |
                         -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID id-ReferenceSFNoffset
                                                            CRITICALITY ignore EXTENSION ReferenceSFNoffset
                                                                                                                                    PRESENCE
optional }|
    { ID id-IPDLParameter-Information-Cell-SetupRqstTDD
                                                            CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-SetupRqstTDD
    PRESENCE optional }
                        -- Applicable to 3.84Mcps TDD only
    { ID id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD
                                                            CRITICALITY reject EXTENSION IPDLParameter-Information-LCR-Cell-SetupRqstTDD
    PRESENCE optional },
                        -- Applicable to 1.28Mcps TDD only
    . . .
SCH-Information-Cell-SetupRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                         CommonPhysicalChannelID,
    syncCaseIndicator
                                         SyncCaseIndicator-Cell-SetupRgstTDD-PSCH,
    sCH-Power
                                         DL-Power.
    tSTD-Indicator
                                         TSTD-Indicator,
                                         ProtocolExtensionContainer { { SCH-Information-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
SCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncCaseIndicator-Cell-SetupRgstTDD-PSCH ::= ProtocolIE-Single-Container {{ SyncCaseIndicatorIE-Cell-SetupRgstTDD-PSCH }}
SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH NBAP-PROTOCOL-IES ::= {
    PRESENCE
mandatory }
SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE {
    case1
                                      Case1-Cell-SetupRgstTDD,
                                      Case2-Cell-SetupRqstTDD,
    case2
    . . .
Case1-Cell-SetupRqstTDD ::= SEQUENCE {
   timeSlot
                                     TimeSlot,
   iE-Extensions
                                      ProtocolExtensionContainer { { CaselItem-Cell-SetupRgstTDD-ExtIEs} } }
                                                                                                          OPTIONAL,
CaselItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Case2-Cell-SetupRqstTDD ::= SEQUENCE {
   sCH-TimeSlot
                                      SCH-TimeSlot,
```

```
iE-Extensions
                                                                                                            OPTIONAL,
Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                          CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
                                          PCCPCH-Power,
   pCCPCH-Power
    sCTD-Indicator
                                          SCTD-Indicator,
                                          ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD
TimeSlotConfigurationItem-Cell-SetupRgstTDD ::= SEQUENCE {
   timeSlot
                                          TimeSlot,
    timeSlotStatus
                                          TimeSlotStatus,
    timeSlotDirection
                                          TimeSlotDirection,
   iE-Extensions
                                          ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                OPTIONAL,
TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
   timeSlotLCR
                                          TimeSlotLCR,
    timeSlotStatus
                                          TimeSlotStatus,
    timeSlotDirection
                                          TimeSlotDirection,
                                          ProtocolExtensionContainer { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                   OPTIONAL,
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE
                                          CommonPhysicalChannelID,
    commonPhysicalChannelID
```

```
tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   pCCPCH-Power
                                          PCCPCH-Power,
   sCTD-Indicator
                                          SCTD-Indicator,
   tSTD-Indicator
                                          TSTD-Indicator,
                                          ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                              OPTIONAL,
PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-LCR-Information-Cell-SetupRgstTDD ::= SEOUENCE {
   commonPhysicalChannelId
                                  CommonPhysicalChannelID,
   tSTD-Indicator
                                  TSTD-Indicator,
   dwPCH-Power
                                  DwPCH-Power,
                                  ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                     OPTIONAL,
DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
IPDLParameter-Information-Cell-SetupRgstTDD ::= SEQUENCE {
   iPDL-TDD-Parameters
                                          IPDL-TDD-Parameters,
   iPDL-Indicator
                                          IPDL-Indicator,
                                          ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
   iPDL-TDD-Parameters-LCR
                                          IPDL-TDD-Parameters-LCR,
   iPDL-Indicator
                                          IPDL-Indicator,
   iE-Extensions
                                          ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                    OPTIONAL,
    . . .
IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   ******************
-- CELL SETUP RESPONSE
__ ********************************
CellSetupResponse ::= SEQUENCE {
```

```
{{CellSetupResponse-IEs}},
   protocolIEs
                            ProtocolIE-Container
   protocolExtensions
                            ProtocolExtensionContainer {{CellSetupResponse-Extensions}}
                                                                                      OPTIONAL,
CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
                                                                          CriticalityDiagnostics
          id-CriticalityDiagnostics
                                      CRITICALITY
                                                     ignore
                                                                   TYPE
                                                                                                 PRESENCE optional },
   . . .
CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- CELL SETUP FAILURE
  CellSetupFailure ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{CellSetupFailure-IEs}},
                        ProtocolExtensionContainer {{CellSetupFailure-Extensions}}
   protocolExtensions
                                                                                     OPTIONAL,
   . . .
CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                          CRITICALITY ignore
                                                                   TYPE
                                                                          Cause
                                                                                         PRESENCE mandatory }
          id-CriticalityDiagnostics
                                                                          CriticalityDiagnostics
   { ID
                                          CRITICALITY ignore
                                                                   TYPE
                                                                                               PRESENCE optional },
CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- CELL RECONFIGURATION REQUEST FDD
__ ********************************
CellReconfigurationRequestFDD ::= SEQUENCE {
                                            {{CellReconfigurationRequestFDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CellReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                              OPTIONAL,
CellReconfigurationRequestFDD-IES NBAP-PROTOCOL-IES ::= {
   { ID
         id-C-ID
                                                            CRITICALITY reject TYPE C-ID
                                                                                                                   PRESENCE
mandatory } |
   { ID
         id-ConfigurationGenerationID
                                                            CRITICALITY reject TYPE ConfigurationGenerationID
   PRESENCE mandatory } |
```

```
id-MaximumTransmissionPower
                                                                    CRITICALITY reject TYPE MaximumTransmissionPower
    PRESENCE optional } |
    { ID
           id-Synchronisation-Configuration-Cell-ReconfRqst
                                                                    CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRqst
    PRESENCE optional }
           id-PrimarySCH-Information-Cell-ReconfRgstFDD
                                                                    CRITICALITY reject TYPE PrimarySCH-Information-Cell-ReconfRqstFDD
    PRESENCE optional } |
    { ID
           id-SecondarySCH-Information-Cell-ReconfRqstFDD
                                                                    CRITICALITY reject TYPE SecondarySCH-Information-Cell-ReconfRqstFDD
    PRESENCE optional } |
           id-PrimaryCPICH-Information-Cell-ReconfRqstFDD
                                                                    CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-ReconfRqstFDD
    PRESENCE optional } |
          id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD
                                                                    CRITICALITY reject TYPE SecondaryCPICH-InformationList-Cell-ReconfRqstFDD
    { ID
    PRESENCE optional } |
           id-PrimaryCCPCH-Information-Cell-ReconfRgstFDD
                                                                    CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-ReconfRqstFDD
    PRESENCE optional },
CellReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-IPDLParameter-Information-Cell-ReconfRqstFDD CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-ReconfRqstFDD
    PRESENCE optional } |
    {ID id-PDSCH-Information-Cell-ReconfRqstFDD
                                                        CRITICALITY reject EXTENSION PDSCH-Information-Cell-ReconfRqstFDD
    PRESENCE optional },
Synchronisation-Configuration-Cell-ReconfRqst ::= SEQUENCE {
                           N-INSYNC-IND,
    n-INSYNC-IND
    n-OUTSYNC-IND
                            N-OUTSYNC-IND,
    t-RLFAILURE
                            T-RLFAILURE,
                            ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
    . . .
Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
                                            CommonPhysicalChannelID,
    commonPhysicalChannelID
    primarySCH-Power
                                            DL-Power,
                                            ProtocolExtensionContainer { { PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
PrimarySCH-Information-Cell-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    secondarySCH-Power
                                            DL-Power,
   iE-Extensions
                                            ProtocolExtensionContainer { { SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                                      OPTIONAL,
```

```
SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                        CommonPhysicalChannelID,
   primaryCPICH-Power
                                        PrimaryCPICH-Power,
   iE-Extensions
                                        ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                          OPTIONAL,
PrimaryCPICH-Information-Cell-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondaryCPICH-InformationList-Cell-ReconfRgstFDD ::= SEOUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ SecondaryCPICH-
InformationItemIE-Cell-ReconfRqstFDD }}
SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD
       PRESENCE mandatory }
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                           CommonPhysicalChannelID,
   secondaryCPICH-Power
                                           DL-Power,
   iE-Extensions
                                           ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD-ExtIEs} }
   OPTIONAL,
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
                                        BCH-information-Cell-ReconfRgstFDD,
   bCH-information
                                        ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
   . . .
PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCH-information-Cell-ReconfRgstFDD ::= SEOUENCE {
   commonTransportChannelID
                                        CommonTransportChannelID,
   bCH-Power
                                        DL-Power,
                                        iE-Extensions
                                                                                                                 OPTIONAL,
BCH-information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
IPDLParameter-Information-Cell-ReconfRqstFDD::= SEQUENCE {
   iPDL-FDD-Parameters
                                             IPDL-FDD-Parameters
                                                                    OPTIONAL.
   iPDL-Indicator
                                             IPDL-Indicator,
   iE-Extensions
                                          ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                               OPTIONAL,
IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-Information-Cell-ReconfRqstFDD
                                    ::= SEOUENCE {
   maximumPDSCH-Power
                              Maximum-PDSCH-Power,
                              ProtocolExtensionContainer { { PDSCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
PDSCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         -- CELL RECONFIGURATION REQUEST TDD
  *****************
CellReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                {{CellReconfigurationRequestTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}}
CellReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                         CRITICALITY reject TYPE C-ID
                                                                                                     PRESENCE mandatory } |
     ID id-ConfigurationGenerationID
                                                         CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                   PRESENCE mandatory } |
    ID id-Synchronisation-Configuration-Cell-ReconfRqst
                                                         CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRqst
optional }|
     ID id-TimingAdvanceApplied
                                                         CRITICALITY reject TYPE TimingAdvanceApplied
                                                                                                              PRESENCE optional }
    { ID id-SCH-Information-Cell-ReconfRqstTDD
                                                         CRITICALITY reject TYPE SCH-Information-Cell-ReconfRqstTDD
                                                                                                                      PRESENCE optional } |
    -- Applicable to 3.84Mcps TDD only
     ID id-PCCPCH-Information-Cell-ReconfRgstTDD
                                                         CRITICALITY reject TYPE PCCPCH-Information-Cell-ReconfRqstTDD PRESENCE optional }
     ID id-MaximumTransmissionPower
                                                         CRITICALITY reject TYPE MaximumTransmissionPower
                                                                                                                 PRESENCE optional }
    { ID id-DPCHConstant
                                                         CRITICALITY reject TYPE ConstantValue
                                                                                                        PRESENCE optional } |
    -- This IE shall be ignored by the Node B.
    { ID id-PUSCHConstant
                                                         CRITICALITY reject TYPE ConstantValue
                                                                                                        PRESENCE optional } |
   -- This IE shall be ignored by the Node B.
   { ID id-PRACHConstant
                                                         CRITICALITY reject TYPE ConstantValue
                                                                                                        PRESENCE optional }
    -- This IE shall be ignored by the Node B.
   { ID id-TimeSlotConfigurationList-Cell-ReconfRqstTDD
                                                         CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-ReconfRqstTDD
                                                                                                                               PRESENCE
optional },
```

```
-- Mandatory for 3.84Mcps TDD only. Not Applicable to 1.28Mcps TDD.
CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
         id-TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD
   PRESENCE optional } |
                        -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
         id-DwPCH-LCR-Information-Cell-ReconfRgstTDD
                                                         CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-ReconfrastTDD
   PRESENCE optional } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
   PRESENCE optional } -- Applicable to 3.84Mcps TDD only
   { ID id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-LCR-Cell-ReconfRqstTDD
   PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
SCH-Information-Cell-ReconfRgstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                       CommonPhysicalChannelID,
   sCH-Power
                                       DL-Power,
                                       iE-Extensions
                                                                                                               OPTIONAL.
PSCH-Information-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-Information-Cell-ReconfRgstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                       CommonPhysicalChannelID,
   pCCPCH-Power
                                       PCCPCH-Power,
                                       ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                  OPTIONAL,
PCCPCH-Information-Cell-ReconfrostTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-Cell-ReconfRgstTDD ::= SEOUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRgstTDD
TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
   timeSlot
                                       TimeSlot.
   timeSlotStatus
                                       TimeSlotStatus,
   timeSlotDirection
                                       TimeSlotDirection,
                                       ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRastTDD-ExtIEs} }
   iE-Extensions
TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD
```

```
TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
   timeSlotLCR
                                         TimeSlotLCR.
   timeSlotStatus
                                         TimeSlotStatus.
   timeSlotDirection
                                         TimeSlotDirection,
   iE-Extensions
                                         ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRgstTDD-ExtIEs} }
TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-LCR-Information-Cell-ReconfRgstTDD ::= SEQUENCE
   commonPhysicalChannelId
                                         CommonPhysicalChannelID,
   dwPCH-Power
                                         DwPCH-Power,
   iE-Extensions
                                         ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRgstTDD-ExtIEs} }
                                                                                                                          OPTIONAL,
DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-Cell-ReconfRgstTDD ::= SEOUENCE {
   iPDL-TDD-Parameters
                                         IPDL-TDD-Parameters
                                                                OPTIONAL,
   iPDL-Indicator
                                         IPDL-Indicator.
   iE-Extensions
                                         ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs} }
                                                                                                                             OPTIONAL,
IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
   iPDL-TDD-Parameters-LCR
                                         IPDL-TDD-Parameters-LCR
                                                                   OPTIONAL,
   iPDL-Indicator
                                         IPDL-Indicator,
                                         ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- CELL RECONFIGURATION RESPONSE
  *****************
CellReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                  {{CellReconfigurationResponse-IEs}},
                             ProtocolExtensionContainer {{CellReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL,
```

```
. . .
CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
         id-CriticalityDiagnostics
                                                    ignore
                                                                  TYPE
                                                                         CriticalityDiagnostics PRESENCE optional },
   . . .
CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- CELL RECONFIGURATION FAILURE
__ **********************
CellReconfigurationFailure ::= SEOUENCE {
                                            {{CellReconfigurationFailure-IEs}},
   protocolIEs
                       ProtocolIE-Container
   protocolExtensions
                     ProtocolExtensionContainer {{CellReconfigurationFailure-Extensions}}
                                                                                       OPTIONAL,
   . . .
CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                  CRITICALITY ignore
                                                                                        PRESENCE mandatory } |
                                                           TYPE Cause
   { ID id-CriticalityDiagnostics
                                  CRITICALITY ignore
                                                           TYPE CriticalityDiagnostics
                                                                                        PRESENCE optional },
CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- CELL DELETION REQUEST
__ *******************************
CellDeletionRequest ::= SEQUENCE {
                                             {{CellDeletionRequest-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}
   protocolExtensions
                                                                                   OPTIONAL,
CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID
         id-C-ID
                   CRITICALITY
                                     reject
                                                    TYPE
                                                         C-ID
                                                                     PRESENCE
                                                                                mandatory },
   . . .
CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
-- CELL DELETION RESPONSE
__ **********************
CellDeletionResponse ::= SEOUENCE {
   protocolIEs
                       ProtocolIE-Container {{CellDeletionResponse-IEs}},
                       ProtocolExtensionContainer {{CellDeletionResponse-Extensions}}
   protocolExtensions
                                                                                  OPTIONAL.
CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
          id-CriticalityDiagnostics
                                                                        CriticalityDiagnostics
                                                                                              PRESENCE optional },
                                     CRITICALITY
                                                   ignore
                                                                 TYPE
CellDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    *****************
-- RESOURCE STATUS INDICATION
__ **********************
ResourceStatusIndication ::= SEOUENCE {
                     ProtocolIE-Container
                                          {{ResourceStatusIndication-IEs}},
   protocolIEs
                     ProtocolExtensionContainer {{ResourceStatusIndication-Extensions}} OPTIONAL,
   protocolExtensions
ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
     PRESENCE mandatory } |
   { ID id-Cause
                                         CRITICALITY ignore TYPE Cause
                                                                                      PRESENCE optional },
   . . .
ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
IndicationType-ResourceStatusInd ::= CHOICE
   no-Failure
                                     No-Failure-ResourceStatusInd,
   serviceImpacting
                                     ServiceImpacting-ResourceStatusInd,
No-Failure-ResourceStatusInd ::= SEOUENCE {
   local-Cell-InformationList
                                     Local-Cell-InformationList-ResourceStatusInd
   local-Cell-Group-InformationList
                                     Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
   iE-Extensions
                                     ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
```

```
No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-Power-Local-Cell-Group-InformationList-ResourceStatusInd
                                                                                    ignore
                                                                                                 EXTENSION Power-Local-Cell-Group-
                                                                     CRITICALITY
InformationList-ResourceStatusInd
                                    PRESENCE
                                               optional
Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE-ResourceStatusInd }}
Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE
mandatory }
Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
   local-CellID
                                            Local-Cell-ID,
   addorDeleteIndicator
                                            AddorDeleteIndicator,
   dl-or-global-capacityCredit
                                           DL-or-Global-CapacityCredit
                                                                                    OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   ul-capacityCredit
                                            UL-CapacityCredit
                                                                                    OPTIONAL,
   commonChannelsCapacityConsumptionLaw
                                            CommonChannelsCapacityConsumptionLaw
                                                                                    OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   dedicatedChannelsCapacityConsumptionLaw
                                            DedicatedChannelsCapacityConsumptionLaw
                                                                                    OPTIONAL.
   -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   maximumDL-PowerCapability
                                            MaximumDL-PowerCapability
                                                                                    OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   minSpreadingFactor
                                           MinSpreadingFactor
                                                                                    OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   minimumDL-PowerCapability
                                           MinimumDL-PowerCapability
                                                                                    OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to 'add'
   local-Cell-Group-ID
                                           Local-Cell-ID
                                                                                    OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL.
Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-ReferenceClockAvailability
                                           CRITICALITY ignore
                                                                  EXTENSION ReferenceClockAvailability
                                                                                                         PRESENCE optional } |
   -- This IE shall be present if AddorDeleteIndicator IE is set to 'add' and the Local Cell is related to a TDD cell
          id-Power-Local-Cell-Group-ID
                                           CRITICALITY ignore
                                                                  EXTENSION Local-Cell-ID
                                                                                              PRESENCE optional }
          id-HSDPA-Capability
                                                                                                 PRESENCE optional }
     ID
                                           CRITICALITY ignore
                                                                  EXTENSION HSDPA-Capability
          id-E-DCH-Capability
                                                                                                 PRESENCE optional },
    { ID
                                            CRITICALITY ignore
                                                                  EXTENSION E-DCH-Capability
   . . .
Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE-ResourceStatusInd }}
Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
```

```
Local-Cell-Group-InformationItem-ResourceStatusInd::= SEQUENCE {
    local-Cell-Group-ID
                                                Local-Cell-ID.
    dl-or-global-capacityCredit
                                                DL-or-Global-CapacityCredit,
    ul-capacityCredit
                                                UL-CapacityCredit
                                                                        OPTIONAL.
    commonChannelsCapacityConsumptionLaw
                                                CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                                DedicatedChannelsCapacityConsumptionLaw,
    iE-Extensions
                                                ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} }
    OPTIONAL,
    . . .
Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Power-Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-
Cell-Group-InformationItemIE-ResourceStatusInd }}
Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
           id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-
ResourceStatusInd
                        PRESENCE
                                   mandatory }
Power-Local-Cell-Group-InformationItem-ResourceStatusInd::= SEQUENCE {
    power-Local-Cell-Group-ID
                                                Local-Cell-ID,
    maximumDL-PowerCapability
                                                MaximumDL-PowerCapability,
    iE-Extensions
                                                ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} }
    OPTIONAL,
Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList
                                            Local-Cell-InformationList2-ResourceStatusInd
    local-Cell-Group-InformationList
                                            Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
    cCP-InformationList
                                            CCP-InformationList-ResourceStatusInd
                                                                                            OPTIONAL,
    cell-InformationList
                                            Cell-InformationList-ResourceStatusInd
                                                                                            OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs} }
                                                                                                                                OPTIONAL,
ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd
                                                                                CRITICALITY
                                                                                                ignore
                                                                                                              EXTENSION Power-Local-Cell-Group-
InformationList2-ResourceStatusInd
                                        PRESENCE
                                                    optional
Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE2-ResourceStatusInd }}
```

```
Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
Local-Cell-InformationItem2-ResourceStatusInd ::= SEOUENCE {
   local-Cell-ID
                                          Local-Cell-ID,
   dl-or-global-capacityCredit
                                          DL-or-Global-CapacityCredit
                                                                              OPTIONAL,
   ul-capacityCredit
                                          UL-CapacityCredit
                                                                              OPTIONAL,
   commonChannelsCapacityConsumptionLaw
                                          CommonChannelsCapacityConsumptionLaw
                                                                             OPTIONAL,
   dedicatedChannelsCapacityConsumptionLaw
                                          DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
   maximum-DL-PowerCapability
                                          MaximumDL-PowerCapability
                                                                              OPTIONAL,
   minSpreadingFactor
                                          MinSpreadingFactor
                                                                             OPTIONAL.
   minimumDL-PowerCapability
                                          MinimumDL-PowerCapability
                                                                             OPTIONAL.
   iE-Extensions
                                      ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs} }
                                                                                                                      OPTIONAL.
Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-ReferenceClockAvailability
                                          CRITICALITY ignore
                                                                   EXTENSION ReferenceClockAvailability
                                                                                                         PRESENCE optional }
     TD
          id-HSDPA-Capability
                                          CRITICALITY ignore
                                                                   EXTENSION HSDPA-Capability
                                                                                                 PRESENCE optional } |
    ID
          id-E-DCH-Capability
                                          CRITICALITY ignore
                                                                   EXTENSION E-DCH-Capability
                                                                                                 PRESENCE optional },
Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEOUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE2-ResourceStatusInd }}
Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd
   PRESENCE mandatory }
Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
   local-Cell-Group-ID
                                          Local-Cell-ID,
   dl-or-global-capacityCredit
                                          DL-or-Global-CapacityCredit
                                                                                 OPTIONAL,
   ul-capacityCredit
                                          UL-CapacityCredit
                                                                                 OPTIONAL,
   commonChannelsCapacityConsumptionLaw
                                          CommonChannelsCapacityConsumptionLaw
                                                                                 OPTIONAL,
   dedicatedChannelsCapacityConsumptionLaw
                                          DedicatedChannelsCapacityConsumptionLaw
                                                                                 OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
   OPTIONAL,
   . . .
Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Power-Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-
Local-Cell-Group-InformationItemIE2-ResourceStatusInd }}
Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
         ResourceStatusInd
                     PRESENCE
                               mandatory
```

```
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd::= SEOUENCE {
   power-Local-Cell-Group-ID
                                           Local-Cell-ID,
   maximumDL-PowerCapability
                                           MaximumDL-PowerCapability,
                                           ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCP-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-
ResourceStatusInd }}
CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
   communicationControlPortID
                                       CommunicationControlPortID,
   resourceOperationalState
                                       ResourceOperationalState,
   availabilityStatus
                                       AvailabilityStatus,
   iE-Extensions
                                       ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs} }
                                                                                                                   OPTIONAL,
   . . .
CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-
ResourceStatusInd }}
Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   Cell-InformationItem-ResourceStatusInd ::= SEOUENCE {
   c-ID
                                       C-ID.
   resourceOperationalState
                                       ResourceOperationalState
                                                                                   OPTIONAL,
   availabilityStatus
                                       AvailabilityStatus
                                                                                   OPTIONAL,
   primary-SCH-Information
                                       P-SCH-Information-ResourceStatusInd
                                                                                   OPTIONAL, -- FDD only
   secondary-SCH-Information
                                       S-SCH-Information-ResourceStatusInd
                                                                                   OPTIONAL, -- FDD only
   primary-CPICH-Information
                                       P-CPICH-Information-ResourceStatusInd
                                                                                   OPTIONAL, -- FDD only
   secondary-CPICH-Information
                                       S-CPICH-InformationList-ResourceStatusInd
                                                                                   OPTIONAL, -- FDD only
   primary-CCPCH-Information
                                       P-CCPCH-Information-ResourceStatusInd
                                                                                   OPTIONAL,
   bCH-Information
                                       BCH-Information-ResourceStatusInd
                                                                                   OPTIONAL,
   secondary-CCPCH-InformationList
                                       S-CCPCH-InformationList-ResourceStatusInd
                                                                                   OPTIONAL,
   pCH-Information
                                       PCH-Information-ResourceStatusInd
                                                                                   OPTIONAL,
   pICH-Information
                                       PICH-Information-ResourceStatusInd
                                                                                   OPTIONAL,
   fACH-InformationList
                                       FACH-InformationList-ResourceStatusInd
                                                                                   OPTIONAL,
```

```
pRACH-InformationList
                                         PRACH-InformationList-ResourceStatusInd
                                                                                      OPTIONAL,
   rACH-InformationList
                                         RACH-InformationList-ResourceStatusInd
                                                                                      OPTIONAL,
   aICH-InformationList
                                         AICH-InformationList-ResourceStatusInd
                                                                                      OPTIONAL, -- FDD only
   pCPCH-InformationList
                                         PCPCH-InformationList-ResourceStatusInd
                                                                                      OPTIONAL, -- FDD only
   cPCH-InformationList
                                         CPCH-InformationList-ResourceStatusInd
                                                                                      OPTIONAL, -- FDD only
                                                                                      OPTIONAL, -- FDD only
   aP-AICH-InformationList
                                         AP-AICH-InformationList-ResourceStatusInd
   cDCA-ICH-InformationList
                                         CDCA-ICH-InformationList-ResourceStatusInd
                                                                                      OPTIONAL, -- FDD only
   sCH-Information
                                         SCH-Information-ResourceStatusInd
                                                                                      OPTIONAL, -- Applicable to 3.84Mcps TDD only
   iE-Extensions
                                         ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-ResourceStatusInd
                                                            CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-ResourceStatusInd
                         -- Applicable to 1.28Mcps TDD only
   PRESENCE optional }
   { ID id-DwPCH-LCR-Information-ResourceStatusInd
                                                            CRITICALITY ignore EXTENSION DwPCH-LCR-Information-ResourceStatusInd
                        -- Applicable to 1.28Mcps TDD only
   PRESENCE optional }
    { ID id-HSDSCH-Resources-Information-ResourceStatusInd
                                                            CRITICALITY ignore EXTENSION HS-DSCH-Resources-Information-ResourceStatusInd
   PRESENCE optional }
    { ID id-MICH-Information-ResourceStatusInd
                                                            CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information
   PRESENCE optional }
   { ID id-S-CCPCH-InformationListExt-ResourceStatusInd
                                                            CRITICALITY ignore EXTENSION S-CCPCH-InformationListExt-ResourceStatusInd
   PRESENCE optional } |
   -- Applicable to 3.84Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
   { ID id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd
                                                            CRITICALITY ignore EXTENSION S-CCPCH-LCR-InformationListExt-ResourceStatusInd
   PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
   { ID id-E-DCH-Resources-Information-ResourceStatusInd
                                                            CRITICALITY ignore EXTENSION E-DCH-Resources-Information-ResourceStatusInd
   PRESENCE optional },
P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}
P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}
S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}
P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-P-CPICH-Information CRITICALITY ignore
                                                    TYPE Common-PhysicalChannel-Status-Information
                                                                                                    PRESENCE mandatory }
S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-
ResourceStatusInd }}
S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
```

```
{ ID id-S-CPICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                    PRESENCE mandatory }
P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}
P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-P-CCPCH-Information CRITICALITY ignore
                                           TYPE Common-PhysicalChannel-Status-Information
                                                                                    PRESENCE mandatory }
BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}
BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-CCPCH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
ResourceStatusInd }}
S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-S-CCPCH-Information CRITICALITY ignore
                                          TYPE Common-PhysicalChannel-Status-Information
                                                                                   PRESENCE mandatory }
PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}
PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-PCH-Information CRITICALITY ignore
                                       TYPE Common-TransportChannel-Status-Information
                                                                                  PRESENCE mandatory }
PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}
PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
FACH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-
ResourceStatusInd }}
FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRACH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-
ResourceStatusInd }}
PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-
ResourceStatusInd }}
RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
```

```
AICH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-
ResourceStatusInd }}
AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-
ResourceStatusInd }}
PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   CPCH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-
ResourceStatusInd }}
CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-
ResourceStatusInd }}
AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-AP-AICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                             PRESENCE optional }
CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-
ResourceStatusInd }}
CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}
SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-
ResourceStatusInd }}
FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-FPACH-LCR-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}
DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

```
HS-DSCH-Resources-Information-ResourceStatusInd ::= SEQUENCE {
    resourceOperationalState
                                       ResourceOperationalState,
    availabilityStatus
                                       AvailabilityStatus,
    iE-Extensions
                                       ProtocolExtensionContainer {{ HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs }}
                                                                                                                                   OPTIONAL.
HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
S-CCPCH-InformationListExt-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxSCCPCHCellinExt)) OF ProtocolIE-Single-Container {{ S-CCPCH-
InformationItemIE-ResourceStatusInd }}
S-CCPCH-LCR-InformationListExt-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCellinExtLCR)) OF ProtocolIE-Single-Container {{ S-CCPCH-
InformationItemIE-ResourceStatusInd }}
E-DCH-Resources-Information-ResourceStatusInd ::= SEQUENCE {
    resourceOperationalState
                                       ResourceOperationalState,
    availabilityStatus
                                       AvailabilityStatus,
    iE-Extensions
                                       ProtocolExtensionContainer {{ E-DCH-Resources-Information-ResourceStatusInd-ExtIEs }}
                                                                                                                                OPTIONAL,
E-DCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- SYSTEM INFORMATION UPDATE REQUEST
__ *********************
SystemInformationUpdateRequest ::= SEQUENCE
   protocolIEs
                          ProtocolIE-Container
                                                  {{SystemInformationUpdateRequest-IEs}},
                          ProtocolExtensionContainer {{SystemInformationUpdateRequest-Extensions}}
   protocolExtensions
                                                                                                        OPTIONAL,
SystemInformationUpdateRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                              CRITICALITY reject TYPE C-ID
                                                                                                        PRESENCE mandatory } |
     ID id-BCCH-ModificationTime
                                                              CRITICALITY reject TYPE BCCH-ModificationTime
                                                                                                                       PRESENCE optional } |
     ID id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst
                                                              CRITICALITY reject TYPE MIB-SB-SIB-InformationList-SystemInfoUpdateRqst
    PRESENCE mandatory },
    . . .
SystemInformationUpdateRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
MIB-SB-SIB-InformationList-SystemInfoUpdateRqst ::= SEQUENCE (SIZE (1..maxIB)) OF MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst
```

```
MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst ::= SEQUENCE {
                                      IB-Type.
   iB-Type
                                     IB-OC-ID,
   iB-OC-ID
   deletionIndicator
                                     DeletionIndicator-SystemInfoUpdate,
                                     ProtocolExtensionContainer { { MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs} }
   iE-Extensions
                                                                                                                              OPTIONAL,
MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DeletionIndicator-SystemInfoUpdate ::= CHOICE {
   no-Deletion
                                     No-Deletion-SystemInfoUpdate,
   yes-Deletion
                                     NULL
No-Deletion-SystemInfoUpdate ::= SEQUENCE {
    sIB-Originator
                                         SIB-Originator
                                                                    OPTIONAL,
    -- This IE shall be present if the IB-Type IE is set to "SIB"
   iB-SG-REP
                                         IB-SG-REP
                                                                    OPTIONAL,
    segmentInformationList
                                         SegmentInformationList-SystemInfoUpdate,
                                         ProtocolExtensionContainer { { No-DeletionItem-SystemInfoUpdate-ExtIEs} }
   iE-Extensions
                                                                                                                   OPTIONAL,
No-DeletionItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SegmentInformationList-SystemInfoUpdate ::= ProtocolIE-Single-Container {{ SegmentInformationListIEs-SystemInfoUpdate }}
SegmentInformationListIEs-SystemInfoUpdate NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
SegmentInformationListIE-SystemInfoUpdate ::= SEQUENCE (SIZE (1..maxIBSEG)) OF SegmentInformationItem-SystemInfoUpdate
SegmentInformationItem-SystemInfoUpdate ::= SEOUENCE {
   iB-SG-POS
                                         IB-SG-POS
                                                            OPTIONAL,
   segment-Type
                                         Segment-Type
                                                            OPTIONAL,
    -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
   iB-SG-DATA
                                         IB-SG-DATA
                                                            OPTIONAL,
    -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
   iE-Extensions
                                         ProtocolExtensionContainer { { SegmentInformationItem-SystemInfoUpdate-ExtIEs} } OPTIONAL,
SegmentInformationItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
__ *********************
-- SYSTEM INFORMATION UPDATE RESPONSE
  *****************
SystemInformationUpdateResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{SystemInformationUpdateResponse-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{SystemInformationUpdateResponse-Extensions}}
                                                                                          OPTIONAL,
SystemInformationUpdateResponse-IEs NBAP-PROTOCOL-IES ::= {
         id-CriticalityDiagnostics
                                     CRITICALITY
                                                                TYPE
                                                                       CriticalityDiagnostics
                                                                                            PRESENCE optional },
                                                   ignore
   . . .
SystemInformationUpdateResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  SYSTEM INFORMATION UPDATE FAILURE
    ******************
SystemInformationUpdateFailure ::= SEQUENCE
                                            {{SystemInformationUpdateFailure-IEs}},
   protocolIEs
                       ProtocolIE-Container
                       ProtocolExtensionContainer {{SystemInformationUpdateFailure-Extensions}}
   protocolExtensions
                                                                                          OPTIONAL,
SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
    ID
         id-Cause
                                        CRITICALITY
                                                      ignore
                                                                   TYPE
                                                                          Cause
                                                                                             PRESENCE mandatory }
         id-CriticalityDiagnostics
   { ID
                                        CRITICALITY
                                                      ignore
                                                                   TYPE
                                                                          CriticalityDiagnostics
                                                                                                  PRESENCE optional },
SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK SETUP REQUEST FDD
  ******************
RadioLinkSetupRequestFDD ::= SEQUENCE {
                       ProtocolIE-Container {{RadioLinkSetupRequestFDD-IEs}},
   protocolIEs
   protocolExtensions
                    ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}
                                                                                     OPTIONAL,
```

```
RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                            CRITICALITY reject TYPE CRNC-CommunicationContextID
                                                                                                                             PRESENCE mandatory } |
     ID id-UL-DPCH-Information-RL-SetupRgstFDD
                                                            CRITICALITY reject TYPE UL-DPCH-Information-RL-SetupRqstFDD
                                                                                                                                PRESENCE mandatory
} |
     ID id-DL-DPCH-Information-RL-SetupRgstFDD
                                                            CRITICALITY reject TYPE DL-DPCH-Information-RL-SetupRqstFDD
                                                                                                                                PRESENCE optional } |
                                                            CRITICALITY reject TYPE DCH-FDD-Information
     ID id-DCH-FDD-Information
                                                                                                                       PRESENCE mandatory } |
     ID id-DSCH-FDD-Information
                                                            CRITICALITY reject TYPE DSCH-FDD-Information
                                                                                                                       PRESENCE optional } |
     ID id-TFCI2-Bearer-Information-RL-SetupRqstFDD
                                                            CRITICALITY ignore TYPE TFCI2-Bearer-Information-RL-SetupRqstFDD
                                                                                                                               PRESENCE optional } |
                                                                                                                                PRESENCE mandatory
     ID id-RL-InformationList-RL-SetupRqstFDD
                                                            CRITICALITY notify TYPE RL-InformationList-RL-SetupRqstFDD
} |
    { ID id-Transmission-Gap-Pattern-Sequence-Information
                                                                CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
                PRESENCE optional }
    { ID id-Active-Pattern-Sequence-Information
                                                            CRITICALITY reject TYPE Active-Pattern-Sequence-Information
                                                                                                                                PRESENCE optional },
RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DSCH-FDD-Common-Information
                                                    CRITICALITY ignore EXTENSION DSCH-FDD-Common-Information
                                                                                                                PRESENCE optional }
                                                                                                                    PRESENCE optional }
     ID id-DL-PowerBalancing-Information
                                                    CRITICALITY ignore EXTENSION DL-PowerBalancing-Information
     ID id-HSDSCH-FDD-Information
                                                    CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                              PRESENCE optional } |
                                                                                                     PRESENCE conditional } |
    { ID id-HSDSCH-RNTI
                                                    CRITICALITY reject EXTENSION HSDSCH-RNTI
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-HSPDSCH-RL-ID
                                                    CRITICALITY reject EXTENSION RL-ID
                                                                                                     PRESENCE conditional } |
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-E-DPCH-Information-RL-SetupRgstFDD
                                                    CRITICALITY reject EXTENSION E-DPCH-Information-RL-SetupRqstFDD PRESENCE optional }
    { ID id-E-DCH-FDD-Information
                                                    CRITICALITY reject EXTENSION E-DCH-FDD-Information PRESENCE conditional }
    -- The IE shall be present if E-DPCH Information IE is present
                                                                                                           PRESENCE conditional } |
    { ID id-Serving-E-DCH-RL-ID
                                                    CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
    -- The IE shall be present if E-DPCH Information IE is present
    { ID id-F-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject EXTENSION F-DPCH-Information-RL-SetupRqstFDD PRESENCE optional }|
    { ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                       CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed
    PRESENCE optional },
UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode
                                            UL-ScramblingCode,
    minUL-ChannelisationCodeLength
                                            MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPDCHs
                                            MaxNrOfUL-DPDCHs
                                                                    OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit
                                            PunctureLimit,
    +FCS
                                            TFCS,
    ul-DPCCH-SlotFormat
                                            UL-DPCCH-SlotFormat,
    ul-SIR-Target
                                            UL-SIR,
    diversityMode
                                            DiversityMode,
    sSDT-CellID-Length
                                            SSDT-CellID-Length
                                                                    OPTIONAL,
    s-FieldLength
                                            S-FieldLength
                                                                    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    . . .
UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DPC-Mode
                                                                                                           PRESENCE optional } |
                                                    CRITICALITY reject EXTENSION DPC-Mode
```

```
PRESENCE conditional },
   -- The IE shall be present if E-DPCH Information IE is present
DL-DPCH-Information-RL-SetupRgstFDD ::= SEOUENCE {
    t FCS
   dl-DPCH-SlotFormat
                                         DL-DPCH-SlotFormat,
   tFCI-SignallingMode
                                         TFCI-SignallingMode,
    tFCI-Presence
                                         TFCI-Presence OPTIONAL,
    -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
   multiplexingPosition
                                         MultiplexingPosition,
   pDSCH-RL-ID
                                         RL-ID
                                                         OPTIONAL.
    -- This IE shall be present if the DSCH Information IE is present --
   pDSCH-CodeMapping
                                         PDSCH-CodeMapping
    -- This IE shall be present if the DSCH Information IE is present --
    powerOffsetInformation
                                         PowerOffsetInformation-RL-SetupRqstFDD,
    fdd-TPC-DownlinkStepSize
                                         FDD-TPC-DownlinkStepSize,
   limitedPowerIncrease
                                         LimitedPowerIncrease,
    innerLoopDLPCStatus
                                         InnerLoopDLPCStatus,
   iE-Extensions
                                         ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    . . .
DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
   pO1-ForTFCI-Bits
                                         PowerOffset,
   pO2-ForTPC-Bits
                                         PowerOffset,
                                         PowerOffset,
   pO3-ForPilotBits
   iE-Extensions
                                         ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCI2-Bearer-Information-RL-SetupRqstFDD ::= SEQUENCE {
    t.oAWS
                                      ToAWS,
   toAWE
                                      ProtocolExtensionContainer { { TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                      OPTIONAL,
    . . .
TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-bindingID
                                         CRITICALITY ignore
                                                                EXTENSION
                                                                            BindingID
                                                                                             PRESENCE
                                                                                                        optional }
    { ID id-transportlayeraddress
                                         CRITICALITY ignore
                                                                EXTENSION
                                                                            TransportLayerAddress PRESENCE
                                                                                                              optional },
RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
```

```
ProtocolIE-Single-Container{{ RL-InformationItemIE-RL-SetupRqstFDD }}
RL-InformationItemIE-RL-SetupRgstFDD NBAP-PROTOCOL-IES ::= {
          id-RL-InformationItem-RL-SetupRgstFDD
                                                          CRITICALITY
                                                                          notify
                                                                                         TYPE RL-InformationItem-RL-SetupRqstFDD
                                                                                                                                    PRESENCE
   mandatory}
RL-InformationItem-RL-SetupRgstFDD ::= SEOUENCE {
                                       RL-ID,
   c-TD
                                       C-ID,
    firstRLS-indicator
                                       FirstRLS-Indicator,
    frameOffset
                                       FrameOffset,
    chipOffset
                                      ChipOffset.
   propagationDelay
                                      PropagationDelay
                                                                  OPTIONAL.
   diversityControlField
                                      DiversityControlField
                                                                  OPTIONAL.
    -- This IE shall be present if the RL is not the first one in the RL Information IE
   dl-CodeInformation
                                      FDD-DL-CodeInformation,
    initialDL-transmissionPower
                                      DL-Power,
   maximumDL-power
                                       DL-Power,
   minimumDL-power
                                      DL-Power,
    sSDT-Cell-Identity
                                      SSDT-Cell-Identity
                                                                  OPTIONAL.
    transmitDiversityIndicator
                                      TransmitDiversityIndicator
                                                                      OPTIONAL,
    -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to 'none'
                                      iE-Extensions
RL-InformationItem-RL-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC
                                                      CRITICALITY ignore EXTENSION SSDT-Cell-Identity PRESENCE conditional }|
    -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
     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-Oth-Parameter
                                                      CRITICALITY ignore EXTENSION Qth-Parameter
                                                                                                                PRESENCE optional } |
     ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-for-Channel-Estimation PRESENCE
optional }|
     ID id-Secondary-CPICH-Information
                                                      CRITICALITY ignore EXTENSION CommonPhysicalChannelID PRESENCE optional }
    { ID id-E-DCH-RL-Indication
                                                      CRITICALITY reject EXTENSION E-DCH-RL-Indication PRESENCE optional },
E-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE
   minUL-ChannelisationCodeLengthforE-DCH-FDD MinUL-ChannelisationCodeLengthforE-DCH-FDD,
   maxNrOfUL-E-DPDCHs
                                              MaxNrOfUL-E-DPDCHs
                                                                                                          OPTIONAL.
    -- The IE shall be present if Min UL Channelisation Code Length For E-DCH FDD IE equals 2
                                              PunctureLimit,
   ul-PunctureLimit
   e-TFCS
                                              E-TFCS,
   e-TTT
                                              E-TTI,
   iE-Extensions
                                              ProtocolExtensionContainer { { E-DPCH-Information-RL-SetupRgstFDD-ExtIEs} }
E-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
F-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
   powerOffsetInformation
                                      PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD,
    fdd-TPC-DownlinkStepSize
                                       FDD-TPC-DownlinkStepSize.
   limitedPowerIncrease
                                       LimitedPowerIncrease,
    innerLoopDLPCStatus
                                       InnerLoopDLPCStatus,
                                       ProtocolExtensionContainer { { F-DPCH-Information-RL-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                             OPTIONAL,
F-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD ::= SEQUENCE {
   pO2-ForTPC-Bits
   iE-Extensions
                                       ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-SetupRgstFDD-ExtIEs} } OPTIONAL,
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK SETUP REQUEST TDD
         ******************
RadioLinkSetupRequestTDD ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                   {{RadioLinkSetupRequestTDD-IEs}},
                           ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}} OPTIONAL,
   protocolExtensions
   . . .
RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
                                                          CRITICALITY reject TYPE CRNC-CommunicationContextID
           id-CRNC-CommunicationContextID
                                                                                                                         PRESENCE mandatory } |
          id-UL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                          CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional }
          id-DL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                          CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional }
     ID
           id-DCH-TDD-Information
                                                           CRITICALITY reject TYPE DCH-TDD-Information
                                                                                                                    PRESENCE optional }
           id-DSCH-TDD-Information
                                                                                                                    PRESENCE optional }
     ID
                                                          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
},
    . . .
RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-TDD-Information
                                           CRITICALITY reject
                                                                  EXTENSION HSDSCH-TDD-Information PRESENCE optional }
    { ID id-HSDSCH-RNTI
                                           CRITICALITY reject
                                                                  EXTENSION HSDSCH-RNTI
                                                                                               PRESENCE conditional }
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-HSPDSCH-RL-ID
                                           CRITICALITY reject
                                                                  EXTENSION RL-ID
                                                                                               PRESENCE conditional }
    -- The IE shall be present if HS-DSCH Information IE is present
   { ID id-PDSCH-RL-ID
                                                                                                PRESENCE optional },
                                           CRITICALITY ignore
                                                                  EXTENSION RL-ID
```

```
UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
   ProtocolIE-Single-Container { UL-CCTrCH-InformationItemIE-RL-SetupRgstTDD }}
UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
          id-UL-CCTrCH-InformationItem-RL-SetupRgstTDD
                                                          CRITICALITY
                                                                         notify
                                                                                       TYPE UL-CCTrCH-InformationItem-RL-SetupRgstTDD
   PRESENCE
              mandatory}
UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                        CCTrCH-ID.
   t.FCS
                                        TFCS,
   tFCI-Coding
                                        TFCI-Coding,
   punctureLimit
                                        PunctureLimit,
   uL-DPCH-Information
                                        UL-DPCH-Information-RL-SetupRgstTDD
                                                                            OPTIONAL, -- Applicable to 3.84Mcps TDD only
   iE-Extensions
                                        ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRgstTDD-ExtIEs} }
   . . .
UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-UL-DPCH-LCR-Information-RL-SetupRgstTDD
                                                   CRITICALITY notify EXTENSION UL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional }
   -- Applicable to 1.28Mcps TDD only
   { ID id-UL-SIRTarget
                                                   CRITICALITY reject EXTENSION UL-SIR
                                                                                                    PRESENCE optional }
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
   PRESENCE optional },
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
   . . .
UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}
UL-DPCH-InformationIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
   { ID id-UL-DPCH-InformationList-RL-SetupRgstTDD
                                                  CRITICALITY notify TYPE UL-DPCH-InformationItem-RL-SetupRgstTDD
                                                                                                                 PRESENCE mandatory }
UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   uL-Timeslot-Information
                                        UL-Timeslot-Information,
   iE-Extensions
                                        UL-DPCH-InformationItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
```

```
uL-TimeslotLCR-Information
                                            UL-TimeslotLCR-Information
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs} }
                                                                                                                                      OPTIONAL.
UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-InformationItemIE-RL-
SetupRqstTDD }}
DL-CCTrCH-InformationItemIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
           id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD
                                                                    CRITICALITY
                                                                                    notify
                                                                                                  TYPE DL-CCTrCH-InformationItem-RL-SetupRgstTDD
    PRESENCE
               mandatory}
DL-CCTrCH-InformationItem-RL-SetupRgstTDD ::= SEQUENCE {
    cCTrCH-ID
                                            CCTrCH-ID,
    t.FCS
                                            TFCS,
    tFCI-Coding
                                            TFCI-Coding,
    punctureLimit
                                            PunctureLimit,
                                            TDD-TPC-DownlinkStepSize,
    tdd-TPC-DownlinkStepSize
    cCTrCH-TPCList
                                            CCTrCH-TPCList-RL-SetupRgstTDD
                                                                                    OPTIONAL,
    dL-DPCH-Information
                                            DL-DPCH-Information-RL-SetupRqstTDD
                                                                                    OPTIONAL,
                                                                                                -- Applicable to 3.84Mcps TDD only
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }
                                                                                                                                  OPTIONAL.
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-DPCH-LCR-Information-RL-SetupRgstTDD CRITICALITY notify
                                                                            EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD
                                                                                                                                  PRESENCE optional
    -- Applicable to 1.28Mcps TDD only
     ID id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD
                                                        CRITICALITY ignore
                                                                                EXTENSION DL-Power
                                                                                                        PRESENCE optional }
     ID id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD
                                                       CRITICALITY ignore
                                                                                                        PRESENCE optional }
                                                                                EXTENSION DL-Power
     ID id-CCTrCH-Minimum-DL-Power-RL-SetupRastTDD
                                                        CRITICALITY ignore
                                                                                EXTENSION DL-Power
                                                                                                        PRESENCE optional },
    . . .
CCTrCH-TPCList-RL-SetupRqstTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD
CCTrCH-TPCItem-RL-SetupRqstTDD
                               ::= SEOUENCE {
    cCTrCH-ID
                                            CCTrCH-ID.
    iE-Extensions
                                            ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs} }
CCTrCH-TPCItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}
DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD
                                                        CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD
                                                                                                                             PRESENCE mandatory
```

```
DL-DPCH-InformationItem-RL-SetupRgstTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   dL-Timeslot-Information
                                         DL-Timeslot-Information,
   iE-Extensions
                                         ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }
DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-Information-RL-SetupRgstTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   dL-TimeslotLCR-Information
                                         DL-TimeslotLCR-Information,
   tstdIndicator
                                         TSTD-Indicator,
   iE-Extensions
                                         ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs} }
                                                                                                                            OPTIONAL,
DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-SetupRqstTDD ::= SEQUENCE
   rL-ID
                                         RL-ID,
   c-TD
                                         C-ID,
   frameOffset
                                         FrameOffset,
   specialBurstScheduling
                                         SpecialBurstScheduling,
   initialDL-transmissionPower
                                         DL-Power,
   maximumDL-power
                                         DL-Power,
   minimumDL-power
                                         DL-Power,
   dL-TimeSlotISCPInfo
                                         DL-TimeslotISCPInfo OPTIONAL, -- Applicable to 3.84Mcps TDD only
   iE-Extensions
                                         ProtocolExtensionContainer { { RL-Information-RL-SetupRgstTDD-ExtIEs} }
                                                                                                              OPTIONAL,
   . . .
RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional }
   -- Applicable to 1.28Mcps TDD only
     ID id-RL-Specific-DCH-Info
                                                    CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                         PRESENCE optional } |
     ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }
    { ID id-UL-Synchronisation-Parameters-LCR
                                                    CRITICALITY reject EXTENSION UL-Synchronisation-Parameters-LCR PRESENCE optional },
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
   . . .
  ************************
```

```
-- RADIO LINK SETUP RESPONSE FDD
RadioLinkSetupResponseFDD ::= SEQUENCE {
    protocolIEs
                                                    {{RadioLinkSetupResponseFDD-IEs}},
                            ProtocolIE-Container
                            ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}}
    protocolExtensions
                                                                                                     OPTIONAL,
RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                        CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                          PRESENCE mandatory } |
     ID id-NodeB-CommunicationContextID
                                                        CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                                                          PRESENCE mandatory } |
     ID id-CommunicationControlPortID
                                                        CRITICALITY ignore TYPE CommunicationControlPortID
                                                                                                                          PRESENCE mandatory }
     ID id-RL-InformationResponseList-RL-SetupRspFDD
                                                                                                                                PRESENCE mandatory
                                                        CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD
} |
     ID id-TFCI2-BearerInformationResponse
                                                        CRITICALITY ignore TYPE TFCI2-BearerInformationResponse
                                                                                                                             PRESENCE optional } |
     ID id-CriticalityDiagnostics
                                                        CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                    PRESENCE optional },
    . . .
RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-FDD-Information-Response
                                                        CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                                PRESENCE optional } |
     ID id-E-DCH-FDD-Information-Response
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                                PRESENCE optional },
RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { RL-InformationResponseItemIE-RL-
SetupRspFDD }}
RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
           id-RL-InformationResponseItem-RL-SetupRspFDD
                                                                    CRITICALITY
                                                                                                TYPE RL-InformationResponseItem-RL-SetupRspFDD
                                                                                    ignore
    PRESENCE
                mandatory}
RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-Set-ID
                                                    RL-Set-ID,
    received-total-wide-band-power
                                                    Received-total-wide-band-power-Value,
    diversityIndication
                                                    DiversityIndication-RL-SetupRspFDD,
    dSCH-InformationResponseList
                                                    DSCH-InformationResponseList-RL-SetupRspFDD OPTIONAL,
    sSDT-SupportIndicator
                                                    SSDT-SupportIndicator,
                                                    ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator
                                                        CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                   PRESENCE optional
} |
     ID id-E-DCH-RL-Set-ID
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                 PRESENCE optional }
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                                   PRESENCE optional
} |
    { ID id-Initial-DL-DPCH-TimingAdjustment
                                                        CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                                PRESENCE optional },
```

```
DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining
                                              Combining-RL-SetupRspFDD,
   nonCombiningOrFirstRL
                                              NonCombiningOrFirstRL-RL-SetupRspFDD
Combining-RL-SetupRspFDD ::= SEQUENCE {
   rL-ID
                                              RL-ID,
   iE-Extensions
                                              ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs} }
                                                                                                                  OPTIONAL,
    . . .
Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEOUENCE
   dCH-InformationResponse
                                              DCH-InformationResponse,
   iE-Extensions
                                                  ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs} }
                                                                                                                                  OPTIONAL,
    . . .
NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationResponseList-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspFDD }}
DSCH-InformationResponseListIEs-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse
                                                                                            PRESENCE mandatory }
      *************
-- RADIO LINK SETUP RESPONSE TDD
  ****************
RadioLinkSetupResponseTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                  {{RadioLinkSetupResponseTDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}}
   protocolExtensions
                                                                                                 OPTIONAL,
RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::=
     ID id-CRNC-CommunicationContextID
                                                  CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                               PRESENCE mandatory }
     ID id-NodeB-CommunicationContextID
                                                  CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                                               PRESENCE mandatory }
     ID id-CommunicationControlPortID
                                                  CRITICALITY ignore TYPE CommunicationControlPortID
                                                                                                            PRESENCE mandatory } |
    { ID id-RL-InformationResponse-RL-SetupRspTDD
                                                 CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD
                                                                                                                       PRESENCE optional }
    -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
    { ID id-CriticalityDiagnostics
                                                  CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                         PRESENCE optional },
    . . .
```

```
RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-RL-InformationResponse-LCR-RL-SetupRspTDD CRITICALITY ignore EXTENSION RL-InformationResponse-LCR-RL-SetupRspTDD
              } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
   { ID id-HSDSCH-TDD-Information-Response
                                              CRITICALITY ignore
                                                                                                           PRESENCE optional },
                                                                   EXTENSION HSDSCH-TDD-Information-Response
RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE
                                              RL-ID,
   uL-TimeSlot-ISCP-Info
                                              UL-TimeSlot-ISCP-Info,
   ul-PhysCH-SF-Variation
                                              UL-PhysCH-SF-Variation,
   dCH-InformationResponseList
                                              DCH-InformationResponseList-RL-SetupRspTDD
                                                                                         OPTIONAL,
   dSCH-InformationResponseList
                                              DSCH-InformationResponseList-RL-SetupRspTDD
                                                                                         OPTIONAL,
   uSCH-InformationResponseList
                                              USCH-InformationResponseList-RL-SetupRspTDD
                                                                                         OPTIONAL,
                                              ProtocolExtensionContainer { { RL-InformationResponseList-RL-SetupRspTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
RL-InformationResponseList-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
   { ID id-DCH-InformationResponse CRITICALITY
                                              ignore
                                                               DCH-InformationResponse PRESENCE mandatory
DSCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspTDD }}
DSCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
USCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-SetupRspTDD }}
USCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RL-InformationResponse-LCR-RL-SetupRspTDD ::= SEQUENCE {
   rL-ID
                                              RL-ID,
   uL-TimeSlot-ISCP-LCR-Info
                                              UL-TimeSlot-ISCP-LCR-Info,
   ul-PhysCH-SF-Variation
                                              UL-PhysCH-SF-Variation,
   dCH-InformationResponseList
                                              DCH-InformationResponseList-RL-SetupRspTDD
                                                                                         OPTIONAL,
   dSCH-InformationResponseList
                                              DSCH-InformationResponseList-RL-SetupRspTDD
                                                                                         OPTIONAL,
   uSCH-InformationResponseList
                                              USCH-InformationResponseList-RL-SetupRspTDD
                                                                                         OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs} }
   OPTIONAL,
```

```
RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
      -- RADIO LINK SETUP FAILURE FDD
  *****************
RadioLinkSetupFailureFDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{RadioLinkSetupFailureFDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
                                                                                             OPTIONAL.
RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::=
     ID id-CRNC-CommunicationContextID
                                             CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                   PRESENCE mandatory }
                                                                                                     PRESENCE conditional } |
    { ID id-NodeB-CommunicationContextID
                                             CRITICALITY ignore TYPE NodeB-CommunicationContextID
    -- This IE shall be present if at least one of the radio links has been successfully set up
    { ID id-CommunicationControlPortID
                                             CRITICALITY ignore TYPE CommunicationControlPortID
                                                                                                   PRESENCE optional } |
                                                                                                     PRESENCE mandatory } |
     ID id-CauseLevel-RL-SetupFailureFDD
                                             CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureFDD
    { ID id-CriticalityDiagnostics
                                             CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                PRESENCE optional },
RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-SetupFailureFDD ::= CHOICE {
   generalCause
                      GeneralCauseList-RL-SetupFailureFDD
                      RLSpecificCauseList-RL-SetupFailureFDD,
   rLSpecificCause
GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE
   cause
   iE-Extensions
                                             ProtocolExtensionContainer { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} }
GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD
                                                             Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD
                                                             Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
   iE-Extensions
                                             ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} }
                                                                                                                            OPTIONAL,
    . . .
```

```
RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-HSDSCH-FDD-Information-Response
                                                CRITICALITY ignore
                                                                        EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                          PRESENCE optional }
     ID id-E-DCH-FDD-Information-Response
                                                CRITICALITY ignore
                                                                        EXTENSION E-DCH-FDD-Information-Response
                                                                                                                       PRESENCE optional }.
Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
           id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD
                                                                            CRITICALITY
                                                                                             ignore
                                                                                                        TYPE Unsuccessful-RL-InformationRespItem-
RL-SetupFailureFDD
                        PRESENCE
                                    mandatory }
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
                                                RL-ID,
    cause
                                                Cause,
    iE-Extensions
                                                ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    . . .
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEOUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID
           id-Successful-RL-InformationRespItem-RL-SetupFailureFDD
                                                                            CRITICALITY
                                                                                             ignore
                                                                                                        TYPE Successful-RL-InformationRespItem-RL-
SetupFailureFDD
                    PRESENCE
                                mandatory}
Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEOUENCE {
    rL-ID
                                                RL-ID,
    rL-Set-ID
                                                RL-Set-ID,
    received-total-wide-band-power
                                                Received-total-wide-band-power-Value,
    diversityIndication
                                                DiversityIndication-RL-SetupFailureFDD,
    dSCH-InformationResponseList
                                                DSCH-InformationRespList-RL-SetupFailureFDD
                                                                                                 OPTIONAL,
    tFCI2-BearerInformationResponse
                                                TFCI2-BearerInformationResponse
                                                                                     OPTIONAL,
    -- There shall be only one TFCI2 bearer per Node B Communication Context.
    sSDT-SupportIndicator
                                                SSDT-SupportIndicator,
    iE-Extensions
                                                ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-ActivationIndicator
                                                        CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                   PRESENCE optional
} |
      ID id-E-DCH-RL-Set-ID
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                 PRESENCE optional }
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                                   PRESENCE optional
} |
```

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```
{ ID id-Initial-DL-DPCH-TimingAdjustment
                                                   CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                    PRESENCE optional },
DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
   combining
                                           Combining-RL-SetupFailureFDD,
   nonCombiningOrFirstRL
                                           NonCombiningOrFirstRL-RL-SetupFailureFDD
Combining-RL-SetupFailureFDD ::= SEQUENCE {
   rL-ID
                                           RL-ID,
                                           ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} }
   iE-Extensions
                                                                                                                 OPTIONAL,
   . . .
CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
   dCH-InformationResponse
                                           DCH-InformationResponse,
   iE-Extensions
                                               ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} }
   OPTIONAL,
   . . .
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationRespList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationRespListIEs-RL-SetupFailureFDD }}
DSCH-InformationRespListIEs-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
    *****************
-- RADIO LINK SETUP FAILURE TDD
__ *********************
RadioLinkSetupFailureTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                              {{RadioLinkSetupFailureTDD-IEs}},
                         ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}
   protocolExtensions
                                                                                           OPTIONAL,
RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                               CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                    PRESENCE mandatory
     ID
          id-CauseLevel-RL-SetupFailureTDD
                                               CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureTDD
                                                                                                   PRESENCE mandatory
     ID
          id-CriticalityDiagnostics
                                               CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                              PRESENCE optional },
```

```
RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-SetupFailureTDD ::= CHOICE {
    generalCause
                        GeneralCauseList-RL-SetupFailureTDD,
    rLSpecificCause
                        RLSpecificCauseList-RL-SetupFailureTDD,
GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    iE-Extensions
                                ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs} }
                                                                                                                 OPTIONAL.
GeneralCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-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 NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
          id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD
                                                                        CRITICALITY ignore
                                                                                                TYPE
                                                                                                        Unsuccessful-RL-InformationResp-RL-
SetupFailureTDD
                    PRESENCE
                                mandatory
Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
    rL-ID
                                                RL-ID,
    cause
    iE-Extensions
                                                ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs} }
    OPTIONAL,
Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
-- RADIO LINK ADDITION REQUEST FDD
RadioLinkAdditionRequestFDD ::= SEQUENCE {
                           ProtocolIE-Container
                                                  {{RadioLinkAdditionRequestFDD-IEs}},
   protocolIEs
                           ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}
   protocolExtensions
                                                                                                       OPTIONAL,
RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                                  CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                          PRESENCE mandatory
     ID id-Compressed-Mode-Deactivation-Flag
                                                  CRITICALITY reject TYPE Compressed-Mode-Deactivation-Flag
                                                                                                                PRESENCE optional } |
     ID id-RL-InformationList-RL-AdditionRgstFDD
                                                  CRITICALITY notify TYPE RL-InformationList-RL-AdditionRqstFDD
                                                                                                                   PRESENCE mandatory
RadioLinkAdditionRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                         CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed
   PRESENCE optional },
    . . .
RL-InformationList-RL-AdditionRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-
AdditionRqstFDD}}
RL-InformationItemIE-RL-AdditionRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-AdditionRgstFDD CRITICALITY notify TYPE RL-InformationItem-RL-AdditionRgstFDD
                                                                                                                     PRESENCE mandatory}
RL-InformationItem-RL-AdditionRgstFDD ::= SEQUENCE
   rI.-ID
                                              RL-ID,
   c-ID
                                              C-ID,
   frameOffset
                                              FrameOffset,
    chipOffset
                                              ChipOffset,
   diversityControlField
                                              DiversityControlField,
    dl-CodeInformation
                                              FDD-DL-CodeInformation,
   initialDL-TransmissionPower
                                              DL-Power
                                                                             OPTIONAL,
   maximumDL-Power
                                              DL-Power
                                                                             OPTIONAL,
   minimumDL-Power
                                              DL-Power
                                                                             OPTIONAL,
    sSDT-CellIdentity
                                              SSDT-Cell-Identity
                                                                             OPTIONAL,
    transmitDiversityIndicator
                                              TransmitDiversityIndicator
                                                                             OPTIONAL,
                                              iE-Extensions
                                                                                                                              OPTIONAL,
RL-InformationItem-RL-AdditionRgstFDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DLReferencePower
                                                      CRITICALITY ignore EXTENSION DL-Power
                                                                                                             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-Oth-Parameter
                                                      CRITICALITY ignore EXTENSION Oth-Parameter
                                                                                                                              PRESENCE optional
    { ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-for-Channel-Estimation PRESENCE
optional }|
```

```
{ ID id-E-DCH-RL-Indication
                                                   CRITICALITY reject EXTENSION E-DCH-RL-Indication
                                                                                                               PRESENCE optional },
  ****************
-- RADIO LINK ADDITION REQUEST TDD
        RadioLinkAdditionRequestTDD ::= SEQUENCE {
                         ProtocolIE-Container
                                               {{RadioLinkAdditionRequestTDD-IEs}},
   protocolIEs
   protocolExtensions
                         ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}
                                                                                              OPTIONAL.
RadioLinkAdditionRequestTDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                      CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                       PRESENCE
mandatory } |
    { ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                                      CRITICALITY reject TYPE UL-CCTrCH-InformationList-RL-AdditionRgstTDD PRESENCE optional
} |
    { ID id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                                       CRITICALITY reject TYPE DL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional
} |
    { ID id-RL-Information-RL-AdditionRgstTDD
                                                      CRITICALITY reject TYPE RL-Information-RL-AdditionRgstTDD
                                                                                                                       PRESENCE
mandatory },
RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD
UL-CCTrCH-InformationItem-RL-AdditionRgstTDD ::= SEOUENCE {
   cCTrCH-ID
                                           CCTrCH-ID,
   uL-DPCH-Information
                                           UL-DPCH-InformationList-RL-AdditionRqstTDD
                                                                                       OPTIONAL, -- Applicable to 3.84cps TDD only
                                           ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD
                  optional } -- Applicable to 1.28cps TDD only
    TDD-TPC-UplinkStepSize-LCR PRESENCE optional },
-- Applicable to 1.28cps TDD only
UL-DPCH-InformationList-RL-AdditionRgstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRgstTDD }}
UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
          id-UL-DPCH-InformationItem-RL-AdditionRqstTDD
                                                              CRITICALITY
                                                                            notify
                                                                                         TYPE UL-DPCH-InformationItem-RL-AdditionRqstTDD
                     optional -- For 3.84Mcps TDD only
```

```
UL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   tdd-DPCHOffset
                                          TDD-DPCHOffset,
   uL-Timeslot-Information
                                          UL-Timeslot-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }
UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationList-RL-AdditionRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRgstTDD
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                  CCTrCH-ID,
   dL-DPCH-Information
                                  DL-DPCH-InformationList-RL-AdditionRqstTDD
                                                                                 OPTIONAL, -- Applicable to 3.84Mcps TDD only
   iE-Extensions
                                  ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
           id-DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD
                                                             CRITICALITY notify
                                                                                     EXTENSION DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD
                   optional } | -- Applicable to 1.28Mcps TDD only
     ID id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD
                                                             CRITICALITY ignore
                                                                                     EXTENSION DL-Power
                                                                                                                PRESENCE optional }
     ID id-TDD-TPC-DownlinkStepSize-RL-AdditionRgstTDD
                                                                                     EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional } |
                                                             CRITICALITY reject
     ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD
                                                                                                                PRESENCE optional } |
                                                             CRITICALITY ignore
                                                                                     EXTENSION DL-Power
     ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRgstTDD
                                                                                                               PRESENCE optional },
                                                             CRITICALITY ignore
                                                                                     EXTENSION DL-Power
DL-DPCH-InformationList-RL-AdditionRgstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRgstTDD }}
DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
          id-DL-DPCH-InformationItem-RL-AdditionRgstTDD
                                                             CRITICALITY
                                                                             notify
                                                                                         TYPE DL-DPCH-InformationItem-RL-AdditionRgstTDD
    PRESENCE mandatory}
DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
   dL-Timeslot-Information
                                      DL-Timeslot-Information,
   iE-Extensions
                                              OPTIONAL,
    . . .
DL-DPCH-InformationItem-RL-AdditionRgstTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

```
RL-Information-RL-AdditionRgstTDD ::= SEQUENCE {
   rL-ID
                                                RL-ID.
    c-ID
                                                C-ID,
    frameOffset.
                                                FrameOffset.
    diversityControlField
                                                DiversityControlField,
    initial-DL-Transmission-Power
                                                DL-Power
                                                                    OPTIONAL,
    maximumDL-Power
                                                DL-Power
                                                                    OPTIONAL,
    minimumDL-Power
                                                DI-Power
                                                                    OPTIONAL,
    dL-TimeSlotISCPInfo
                                                DL-TimeslotISCPInfo OPTIONAL,
                                                                                 -- Applicable to 3.84Mcps TDD only
    iE-Extensions
                                                ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs} }
                                                                                                                                   OPTIONAL,
    . . .
RL-information-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD
                                                                        CRITICALITY
                                                                                        reject
                                                                                                     EXTENSION
                                                                                                                DL-TimeslotISCPInfoLCR
    PRESENCE
               optional } | -- Applicable to 1.28Mcps TDD only
      ID id-RL-Specific-DCH-Info
                                        CRITICALITY ignore
                                                                EXTENSION RL-Specific-DCH-Info PRESENCE
                                                                                                              optional }
      ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }
     ID id-UL-Synchronisation-Parameters-LCR
                                                        CRITICALITY reject
                                                                                 EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                                   PRESENCE
    optional }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    . . .
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    uL-TimeslotLCR-Information
                                            UL-TimeslotLCR-Information,
                                            ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    dL-TimeslotLCR-Information
                                            DL-TimeslotLCR-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} }
                                                                                                                                         OPTIONAL,
DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ADDITION RESPONSE FDD
```

```
__ *********************
RadioLinkAdditionResponseFDD ::= SEOUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{RadioLinkAdditionResponseFDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}
                                                                                                     OPTIONAL.
RadioLinkAdditionResponseFDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                         CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                        PRESENCE mandatory
    { ID id-RL-InformationResponseList-RL-AdditionRspFDD
                                                         CRITICALITY ignore TYPE RL-InformationResponseList-RL-AdditionRspFDD PRESENCE
mandatory }|
    { ID id-CriticalityDiagnostics
                                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                      PRESENCE optional },
RadioLinkAdditionResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}
RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-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,
   received-total-wide-band-power
                                     Received-total-wide-band-power-Value,
                                     DiversityIndication-RL-AdditionRspFDD,
   diversityIndication
    sSDT-SupportIndicator
                                     SSDT-SupportIndicator,
   iE-Extensions
                                      OPTIONAL,
RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator
                                                     CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                           PRESENCE optional
} |
                                                                                                          PRESENCE optional } |
     ID id-E-DCH-RL-Set-ID
                                                     CRITICALITY ignore EXTENSION RL-Set-ID
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                     CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                           PRESENCE optional
    { ID id-Initial-DL-DPCH-TimingAdjustment
                                                     CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                         PRESENCE optional },
    . . .
DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
    combining
                                                 Combining-RL-AdditionRspFDD,
    non-combining
                                                 Non-Combining-RL-AdditionRspFDD
```

```
Combining-RL-AdditionRspFDD ::= SEQUENCE {
   rL-ID
                                                 RL-ID.
   iE-Extensions
                                                 ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } }
CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
   dCH-InformationResponse
                                             DCH-InformationResponse,
   iE-Extensions
                                                 ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs} }
                                                                                                                              OPTIONAL,
Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   -- RADIO LINK ADDITION RESPONSE TDD
  RadioLinkAdditionResponseTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{RadioLinkAdditionResponseTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}
                                                                                                 OPTIONAL,
RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                        CRITICALITY ignore TYPE
                                                                                   CRNC-CommunicationContextID
                                                                                                                           PRESENCE
   { ID
   mandatory } |
   { ID
          id-RL-InformationResponse-RL-AdditionRspTDD
                                                        CRITICALITY ignore TYPE
                                                                                   RL-InformationResponse-RL-AdditionRspTDD PRESENCE
   optional }|
                     -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
                                                        CRITICALITY ignore TYPE
   { ID
          id-CriticalityDiagnostics
                                                                                   CriticalityDiagnostics
                                                                                                                        PRESENCE optional },
RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-InformationResponse-LCR-RL-AdditionRspTDD
                                                            CRITICALITY ignore
                                                                                       EXTENSION RL-InformationResponse-LCR-RL-AdditionRspTDD
   PRESENCE optional },
                        -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
   . . .
RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
   rL-ID
                                             RL-ID,
   uL-TimeSlot-ISCP-Info
                                             UL-TimeSlot-ISCP-Info,
   ul-PhysCH-SF-Variation
                                             UL-PhysCH-SF-Variation,
   dCH-Information
                                             DCH-Information-RL-AdditionRspTDD
                                                                                          OPTIONAL,
   dSCH-InformationResponseList
                                             DSCH-InformationResponseList-RL-AdditionRspTDD
                                                                                            OPTIONAL,
   uSCH-InformationResponseList
                                             USCH-InformationResponseList-RL-AdditionRspTDD
                                                                                            OPTIONAL,
```

```
ProtocolExtensionContainer { { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} }
   iE-Extensions
                                                                                                                         OPTIONAL,
RL-InformationResponse-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
                                    DiversityIndication-RL-AdditionRspTDD,
   diversityIndication
   iE-Extensions
                                ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   . . .
DCH-Information-RL-AdditionRspTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD ::= CHOICE
   combining
                                           Combining-RL-AdditionRspTDD,
                                                                        -- Indicates whether the old Transport Bearer shall be reused or
not
   non-Combining
                                           Non-Combining-RL-AdditionRspTDD
Combining-RL-AdditionRspTDD ::= SEQUENCE {
   rL-ID
                                           RL-ID, -- Reference RL
                                           ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } }
   iE-Extensions
                                                                                                                 OPTIONAL,
CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionRspTDD ::= SEQUENCE
   dCH-InformationResponse
                                        DCH-InformationResponse,
   iE-Extensions
                                           ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs} } }
                                                                                                                       OPTIONAL.
Non-CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}
DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}
USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
```

```
RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE
                                              RL-ID,
   uL-TimeSlot-ISCP-InfoLCR
                                              UL-TimeSlot-ISCP-LCR-Info,
   ul-PhysCH-SF-Variation
                                              UL-PhysCH-SF-Variation,
   dCH-Information
                                              DCH-Information-RL-AdditionRspTDD
                                                                                             OPTIONAL,
    dSCH-InformationResponseList
                                              DSCH-InformationResponseList-RL-AdditionRspTDD
                                                                                              OPTIONAL,
   uSCH-InformationResponseList
                                              USCH-InformationResponseList-RL-AdditionRspTDD
                                                                                              OPTIONAL,
                                              ProtocolExtensionContainer { { RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs} }
   iE-Extensions
RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
             *****************
-- RADIO LINK ADDITION FAILURE FDD
__ **********************
RadioLinkAdditionFailureFDD ::= SEOUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                  {{RadioLinkAdditionFailureFDD-IEs}},
                           ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL,
RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                  CRITICALITY ignore
                                                                         TYPE CRNC-CommunicationContextID
                                                                                                                     PRESENCE mandatory }
     ID id-CauseLevel-RL-AdditionFailureFDD
                                                  CRITICALITY ignore
                                                                         TYPE CauseLevel-RL-AdditionFailureFDD
                                                                                                                           PRESENCE mandatory
} |
    { ID id-CriticalityDiagnostics
                                                  CRITICALITY ignore
                                                                         TYPE CriticalityDiagnostics
                                                                                                                PRESENCE optional },
RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
                       GeneralCauseList-RL-AdditionFailureFDD,
   generalCause
   rLSpecificCause
                       RLSpecificCauseList-RL-AdditionFailureFDD,
    . . .
GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
                                              ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    Successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                                                                                         OPTIONAL,
                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
           id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD
                                                                                CRITICALITY
                                                                                                ignore
                                                                                                           TYPE Unsuccessful-RL-
InformationRespItem-RL-AdditionFailureFDD PRESENCE
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
   rL-ID
                                                RL-ID,
    cause
                                                Cause,
    iE-Extensions
                                                ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
           OPTIONAL,
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
         id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD
                                                                            CRITICALITY
                                                                                            ignore
                                                                                                        TYPE Successful-RL-InformationRespItem-RL-
AdditionFailureFDD
                        PRESENCE
                                    mandatory}
Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
   rI.-ID
                                                RL-ID,
    rL-Set-ID
                                                RL-Set-ID,
    received-total-wide-band-power
                                                Received-total-wide-band-power-Value,
    diversityIndication
                                                DiversityIndication-RL-AdditionFailureFDD,
    sSDT-SupportIndicator
                                                SSDT-SupportIndicator,
    iE-Extensions
                                                ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
    OPTIONAL,
Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
```

```
{ ID id-DL-PowerBalancing-ActivationIndicator
                                                     CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                            PRESENCE optional
} |
     ID id-E-DCH-RL-Set-ID
                                                     CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                           PRESENCE optional }|
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                     CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                            PRESENCE optional
} |
    { ID id-Initial-DL-DPCH-TimingAdjustment
                                                                                                                          PRESENCE optional },
                                                     CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
    combining
                                  Combining-RL-AdditionFailureFDD,
    non-Combining
                                  Non-Combining-RL-AdditionFailureFDD
Combining-RL-AdditionFailureFDD ::= SEOUENCE {
   rL-ID
                                              RL-ID.
                                              ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } }
    iE-Extensions
                                                                                                                            OPTIONAL,
CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE
    dCH-InformationResponse
                                              DCH-InformationResponse,
                                              ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                  OPTIONAL,
Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   -- RADIO LINK ADDITION FAILURE TDD
  ****************
RadioLinkAdditionFailureTDD ::= SEQUENCE {
    protocolIEs
                          ProtocolIE-Container
                                                  {{RadioLinkAdditionFailureTDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}
    protocolExtensions
                                                                                                   OPTIONAL,
RadioLinkAdditionFailureTDD-IES NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                     CRITICALITY ignore
                                                                            TYPE CRNC-CommunicationContextID
                                                                                                                 PRESENCE mandatory } |
     ID
           id-CauseLevel-RL-AdditionFailureTDD
                                                     CRITICALITY ignore
                                                                            TYPE CauseLevel-RL-AdditionFailureTDD
                                                                                                                    PRESENCE mandatory } |
     ID
           id-CriticalityDiagnostics
                                                     CRITICALITY ignore
                                                                            TYPE CriticalityDiagnostics
                                                                                                              PRESENCE optional },
RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause
                       GeneralCauseList-RL-AdditionFailureTDD,
                       RLSpecificCauseList-RL-AdditionFailureTDD,
    rLSpecificCause
GeneralCauseList-RL-AdditionFailureTDD ::= SEOUENCE {
    cause
                                Cause,
                                ProtocolExtensionContainer { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }
    iE-Extensions
                                                                                                                    OPTIONAL,
GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD
                                                                Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
                                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
AdditionFailureTDD} }
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
    PRESENCE mandatory }
Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD ::= SEQUENCE {
   rL-ID
                                            RL-ID,
    cause
                                            ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RECONFIGURATION PREPARE FDD
```

```
RadioLinkReconfigurationPrepareFDD ::= SEOUENCE {
    protocolIEs
                            ProtocolIE-Container
                                                    {{RadioLinkReconfigurationPrepareFDD-IEs}},
   protocolExtensions
                            ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
                                                                                                             OPTIONAL.
RadioLinkReconfigurationPrepareFDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                                CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                                PRESENCE mandatory
} |
     ID id-UL-DPCH-Information-RL-ReconfPrepFDD
                                                                CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                               PRESENCE optional }
     ID id-DL-DPCH-Information-RL-ReconfPrepFDD
                                                                CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfPrepFDD PRESENCE optional }
     ID id-FDD-DCHs-to-Modify
                                                                CRITICALITY reject TYPE FDD-DCHs-to-Modify
                                                                                                                         PRESENCE optional } |
                                                                                                                          PRESENCE optional }
     ID id-DCHs-to-Add-FDD
                                                                CRITICALITY reject TYPE DCH-FDD-Information
     ID id-DCH-DeleteList-RL-ReconfPrepFDD
                                                                CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD
                                                                                                                                PRESENCE optional }
     ID id-DSCH-ModifyList-RL-ReconfPrepFDD
                                                                                                                                PRESENCE optional }
                                                                CRITICALITY reject TYPE DSCH-ModifyList-RL-ReconfPrepFDD
     ID id-DSCHs-to-Add-FDD
                                                                CRITICALITY reject TYPE DSCH-FDD-Information
                                                                                                                          PRESENCE optional } |
      ID id-DSCH-DeleteList-RL-ReconfPrepFDD
                                                                CRITICALITY reject TYPE DSCH-DeleteList-RL-ReconfPrepFDD
                                                                                                                                PRESENCE optional } |
     ID id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD
                                                                CRITICALITY reject TYPE TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD
    PRESENCE optional } |
     ID id-RL-InformationList-RL-ReconfPrepFDD
                                                                CRITICALITY reject TYPE RL-InformationList-RL-ReconfPrepFDD PRESENCE optional }
     ID id-Transmission-Gap-Pattern-Sequence-Information
                                                                CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
    PRESENCE optional }.
RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
      ID id-DSCH-FDD-Common-Information
                                                                                                                                PRESENCE optional }
                                                        CRITICALITY ignore EXTENSION DSCH-FDD-Common-Information
     ID id-SignallingBearerRequestIndicator
                                                                                                                                PRESENCE optional }
                                                        CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
                                                                                                                         PRESENCE optional }
     ID id-HSDSCH-FDD-Information
                                                        CRITICALITY reject EXTENSION HSDSCH-FDD-Information
     ID id-HSDSCH-Information-to-Modify
                                                        CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
                                                                                                                                PRESENCE optional }
     ID id-HSDSCH-MACdFlows-to-Add
                                                        CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                                PRESENCE optional }
     ID id-HSDSCH-MACdFlows-to-Delete
                                                                                                                             PRESENCE optional } |
                                                        CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
     ID id-HSDSCH-RNTI
                                                        CRITICALITY reject EXTENSION HSDSCH-RNTI
                                                                                                             PRESENCE conditional } |
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
     ID id-HSPDSCH-RL-ID
                                                        CRITICALITY reject EXTENSION RL-ID
                                                                                                             PRESENCE optional } |
                                                                                                                                PRESENCE optional } |
     ID id-E-DPCH-Information-RL-ReconfPrepFDD
                                                        CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfPrepFDD
     ID id-E-DCH-FDD-Information
                                                        CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                         PRESENCE optional } |
     ID id-E-DCH-FDD-Information-to-Modify
                                                        CRITICALITY reject EXTENSION E-DCH-FDD-Information-to-Modify
                                                                                                                                PRESENCE optional }
     ID id-E-DCH-MACdFlows-to-Add
                                                                                                                                PRESENCE optional }
                                                        CRITICALITY reject EXTENSION E-DCH-MACdFlows-Information
                                                                                                                             PRESENCE optional } |
     ID id-E-DCH-MACdFlows-to-Delete
                                                        CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
     ID id-Serving-E-DCH-RL-ID
                                                        CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
                                                                                                                       PRESENCE optional } |
                                                                                                                                PRESENCE optional },
    { ID id-F-DPCH-Information-RL-ReconfPrepFDD
                                                        CRITICALITY reject EXTENSION F-DPCH-Information-RL-ReconfPrepFDD
    . . .
UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    ul-ScramblingCode
                                                    UL-ScramblingCode
                                                                                        OPTIONAL,
    ul-SIR-Target
                                                    UL-SIR
                                                                                        OPTIONAL,
                                                    MinUL-ChannelisationCodeLength
    minUL-ChannelisationCodeLength
                                                                                        OPTIONAL,
    maxNrOfUL-DPDCHs
                                                    MaxNrOfUL-DPDCHs
                                                                                        OPTIONAL,
    -- This IE shall be present if minUL-ChannelisationCodeLength Ie is set to 4
    ul-PunctureLimit
                                                    PunctureLimit
                                                                                        OPTIONAL,
```

```
TECS
   t FCS
                                                                                 OPTIONAL,
   ul-DPCCH-SlotFormat
                                               UL-DPCCH-SlotFormat
                                                                                 OPTIONAL,
   diversit.vMode
                                               DiversityMode
                                                                                 OPTIONAL.
   sSDT-CellIDLength
                                               SSDT-CellID-Length
                                                                                OPTIONAL,
   s-FieldLength
                                                S-FieldLength
                                                                                 OPTIONAL.
                                                ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
UL-DPCH-Information-RL-ReconfPrepFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE conditional
},
   -- The IE shall be present if E-DPCH Information IE is present
DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
                                                TFCS
                                                                                 OPTIONAL,
   dl-DPCH-SlotFormat
                                                DL-DPCH-SlotFormat
                                                                                 OPTIONAL,
   tFCI-SignallingMode
                                               TFCI-SignallingMode
                                                                                OPTIONAL,
   tFCI-Presence
                                               TFCI-Presence
                                                                                OPTIONAL,
   -- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16
   multiplexingPosition
                                               MultiplexingPosition
                                                                                 OPTIONAL,
   pDSCH-CodeMapping
                                               PDSCH-CodeMapping
                                                                                 OPTIONAL,
   pDSCH-RL-ID
                                               RL-ID
                                                                                OPTIONAL,
   limitedPowerIncrease
                                               LimitedPowerIncrease
                                                                                 OPTIONAL.
   iE-Extensions
                                               ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                          OPTIONAL,
DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-DL-DPCH-Power-Information-RL-ReconfPrepFDD CRITICALITY reject EXTENSION DL-DPCH-Power-Information-RL-ReconfPrepFDD PRESENCE optional
},
   . . .
DL-DPCH-Power-Information-RL-ReconfPrepFDD ::= SEQUENCE {
   powerOffsetInformation
                                        PowerOffsetInformation-RL-ReconfPrepFDD,
   fdd-TPC-DownlinkStepSize
                                        FDD-TPC-DownlinkStepSize,
   innerLoopDLPCStatus
                                        InnerLoopDLPCStatus,
                                        ProtocolExtensionContainer { { DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs } }
   iE-Extensions
                                                                                                                             OPTIONAL,
   . . .
DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-ReconfPrepFDD ::= SEQUENCE {
                                        PowerOffset,
   pO1-ForTFCI-Bits
                                        PowerOffset,
   pO2-ForTPC-Bits
   pO3-ForPilotBits
                                        PowerOffset,
   iE-Extensions
                                        OPTIONAL,
   . . .
```

```
PowerOffsetInformation-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD
DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
   dCH-ID
                                                DCH-ID,
   iE-Extensions
                                                OPTIONAL,
   . . .
DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-ModifyItemIE-RL-ReconfPrepFDD }}
DSCH-ModifyItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
        id-DSCH-ModifyItem-RL-ReconfPrepFDD
                                                CRITICALITY reject
                                                                       TYPE
                                                                              DSCH-ModifyItem-RL-ReconfPrepFDD PRESENCE mandatory}
DSCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
   dscH-ID
                                                DSCH-ID,
   dl-TransportFormatSet
                                                TransportFormatSet
                                                                          OPTIONAL,
   allocationRetentionPriority
                                                AllocationRetentionPriority OPTIONAL,
   frameHandlingPriority
                                                FrameHandlingPriority
                                                                          OPTIONAL,
   toAWS
                                                ToAWS
                                                                          OPTIONAL,
                                                ToAWE
                                                                          OPTIONAL,
   transportBearerRequestIndicator
                                                TransportBearerRequestIndicator,
   iE-Extensions
                                                OPTIONAL,
   . . .
DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID
           id-bindingID
                                            CRITICALITY ignore
                                                                   EXTENSION
                                                                              BindingID
                                                                                           PRESENCE
                                                                                                      optional }
    { ID
          id-transportlayeraddress
                                            CRITICALITY ignore
                                                                   EXTENSION
                                                                              TransportLayerAddress PRESENCE
                                                                                                              optional },
   . . .
DSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-DeleteItemIE-RL-ReconfPrepFDD }}
DSCH-DeleteItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
          id-DSCH-DeleteItem-RL-ReconfPrepFDD
                                                CRITICALITY reject
                                                                      TYPE
                                                                              DSCH-DeleteItem-RL-ReconfPrepFDD PRESENCE mandatory}
DSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
   dSCH-ID
                                                ProtocolExtensionContainer { { DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } 
   iE-Extensions
                                                                                                                         OPTIONAL,
   . . .
```

```
DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD ::= CHOICE {
                           AddOrModify-TFCI2-RL-ReconfPrepFDD,
    add0rModify
   delete
AddOrModify-TFCI2-RL-ReconfPrepFDD ::= SEOUENCE {
    toAWS
                                       ToAWS,
    toAWE
                                       TOAWE,
   iE-Extensions
                                       ProtocolExtensionContainer { { AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs} } }
AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
     ID id-TFCI2BearerRequestIndicator
                                                                                                                       PRESENCE optional } |
                                           CRITICALITY
                                                           reject
                                                                          EXTENSION
                                                                                      TFCI2BearerRequestIndicator
     ID id-bindingID
                                           CRITICALITY
                                                           ignore
                                                                          EXTENSION
                                                                                      BindingID
                                                                                                     PRESENCE
                                                                                                                 optional }
     ID id-transportlayeraddress
                                                                                                                 PRESENCE
                                           CRITICALITY
                                                           ignore
                                                                          EXTENSION
                                                                                      TransportLayerAddress
                                                                                                                            optional },
RL-InformationList-RL-ReconfPrepFDD ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfPrepFDD }}
RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
          id-RL-InformationItem-RL-ReconfPrepFDD
    { ID
                                                          CRITICALITY
                                                                          reject
                                                                                          TYPE RL-InformationItem-RL-ReconfPrepFDD
                                                                                                                                     PRESENCE
   mandatory }
RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE
   rI.-ID
                                                   RL-ID,
   dl-CodeInformation
                                               FDD-DL-CodeInformation
                                                                          OPTIONAL.
   maxDL-Power
                                                   DL-Power
                                                                                              OPTIONAL,
   minDL-Power
                                                   DL-Power
                                                                                              OPTIONAL.
   sSDT-Indication
                                                   SSDT-Indication
                                                                                              OPTIONAL.
    sSDT-Cell-Identity
                                                   SSDT-Cell-Identity
                                                                                              OPTIONAL,
    -- The IE shall be present if the SSDT Indication IE is set to 'SSDT Active in the UE'
                                                  TransmitDiversityIndicator
    transmitDiversityIndicator
                                                                                              OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to 'none'
                                                   iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
RL-InformationItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-SSDT-CellIDforEDSCHPC
                                                   CRITICALITY ignore EXTENSION SSDT-Cell-Identity
                                                                                                              PRESENCE conditional }
    -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
     ID id-DLReferencePower
                                                   CRITICALITY ignore EXTENSION DL-Power
                                                                                                        PRESENCE optional }
     ID id-RL-Specific-DCH-Info
                                                   CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                              PRESENCE optional }
                                                                                                                 PRESENCE optional }
     ID id-DL-DPCH-TimingAdjustment
                                                   CRITICALITY reject EXTENSION DL-DPCH-TimingAdjustment
     ID id-Oth-Parameter
                                                   CRITICALITY ignore EXTENSION Oth-Parameter
                                                                                                                          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
                                                                                                                          PRESENCE optional } |
                                                   CRITICALITY ignore EXTENSION Secondary-CPICH-Information-Change
```

```
PRESENCE optional },
   { ID id-E-DCH-RL-Indication
                                                 CRITICALITY reject EXTENSION E-DCH-RL-Indication
E-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
   minUL-ChannelisationCodeLengthforE-DCH-FDD MinUL-ChannelisationCodeLengthforE-DCH-FDD
                                                                                                       OPTIONAL,
   maxNrOfUL-E-DPDCHs
                                             MaxNrOfUL-E-DPDCHs
                                                                                                       OPTIONAL.
   -- The IE shall be present if Min UL Channelisation Code Length For E-DCH FDD IE equals 2
   ul-PunctureLimit
                                             PunctureLimit
                                                                                                       OPTIONAL,
                                             E-TFCS
   e-TFCS
                                                                                                       OPTIONAL.
   e-TTI
                                             E-TTT
                                                                                                       OPTIONAL,
                                             ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
   iE-Extensions
                                                                                                                       OPTIONAL,
E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
F-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
   powerOffsetInformation
                                     PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD,
   fdd-TPC-DownlinkStepSize
                                     FDD-TPC-DownlinkStepSize,
   limitedPowerIncrease
                                     LimitedPowerIncrease,
   innerLoopDLPCStatus
                                     InnerLoopDLPCStatus,
   iE-Extensions
                                     ProtocolExtensionContainer { { F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                          OPTIONAL,
   . . .
F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD ::= SEQUENCE {
   pO2-ForTPC-Bits
                                     ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL.
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- RADIO LINK RECONFIGURATION PREPARE TDD
  RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
                                                {{RadioLinkReconfigurationPrepareTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
                          ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}
   protocolExtensions
                                                                                                       OPTIONAL,
```

```
RadioLinkReconfigurationPrepareTDD-IES NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                                               CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                               PRESENCE mandatory
} |
    { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
    PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
    PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
    PRESENCE optional } |
     ID id-TDD-DCHs-to-Modify
                                                               CRITICALITY reject TYPE TDD-DCHs-to-Modify
                                                                                                                         PRESENCE optional }
     ID id-DCHs-to-Add-TDD
                                                                                                                         PRESENCE optional }
                                                               CRITICALITY reject TYPE DCH-TDD-Information
     ID id-DCH-DeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
                                                                                                                               PRESENCE optional } |
     ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-ReconfPrepTDD
    PRESENCE optional } |
     ID id-DSCHs-to-Add-TDD
                                                                CRITICALITY reject TYPE DSCH-TDD-Information
                                                                                                                         PRESENCE optional }
    ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DSCH-Information-DeleteList-RL-ReconfPrepTDD
    PRESENCE optional } |
    { ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE USCH-Information-ModifyList-RL-ReconfPrepTDD
    PRESENCE optional }
     ID id-USCH-Information-Add
                                                                CRITICALITY reject TYPE USCH-Information
                                                                                                                      PRESENCE optional }
    { ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE USCH-Information-DeleteList-RL-ReconfPrepTDD
    PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE RL-Information-RL-ReconfPrepTDD
                                                                                                                               PRESENCE optional },
-- This RL Information is the for the 1st RL IE repetition
    . . .
RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
           id-SignallingBearerRequestIndicator
                                                    CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
                                                                                                                            PRESENCE optional } |
           id-HSDSCH-TDD-Information
                                                                                                                   PRESENCE optional }
                                                    CRITICALITY reject EXTENSION HSDSCH-TDD-Information
           id-HSDSCH-Information-to-Modify
                                                    CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
                                                                                                                         PRESENCE optional }
           id-HSDSCH-MACdFlows-to-Add
                                                    CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                         PRESENCE optional } |
     ID
           id-HSDSCH-MACdFlows-to-Delete
                                                    CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                      PRESENCE optional }
     ID
           id-HSDSCH-RNTI
                                                    CRITICALITY reject EXTENSION HSDSCH-RNTI
                                                                                                          PRESENCE conditional } |
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
           id-HSPDSCH-RL-ID
     ID
                                                    CRITICALITY reject EXTENSION RL-ID
                                                                                                          PRESENCE optional }
           id-PDSCH-RL-ID
                                                    CRITICALITY ignore EXTENSION RL-ID
                                                                                                          PRESENCE optional }
     ID
                                                           CRITICALITY reject EXTENSION MultipleRL-Information-RL-ReconfPrepTDD
    { ID
           id-multiple-RL-Information-RL-ReconfPrepTDD
                                                                                                                                    PRESENCE
optional
-- This RL Information is the for the 2nd and beyond repetition of RL information,
UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                               CCTrCH-ID,
    tFCS
                                               TFCS,
```

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tFCI-Coding
                                                TFCI-Coding,
    punctureLimit
                                                PunctureLimit.
    ul-DPCH-InformationList
                                                UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL.
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
                                                ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
    { ID id-UL-SIRTarget
                                                                CRITICALITY reject EXTENSION UL-SIR PRESENCE optional } |
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
-- This Information is the for the first RL repetition, SIR Target information for RL repetitions 2 and on, should be defined in MultipleRL-UL-
DPCH-InformationAddList-RL-ReconfPrepTDD
     ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE optional
-- This Information is the for the first RL repetition, TPCinformation for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
    { ID id-RL-ID
                                                                CRITICALITY ignore EXTENSION RL-ID PRESENCE optional }
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-ul-DPCH-InformationList
                                                               CRITICALITY reject EXTENSION MultipleRL-UL-DPCH-InformationAddList-RL-
ReconfPrepTDD PRESENCE optional },
-- This Information is the for the 2nd and beyond RL repetition,
MultipleRL-UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-UL-DPCH-InformationAddListIE-RL-
--Includes the 2nd through the max number of radio link repetitions.
MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD ::= SEQUENCE {
    ul-DPCH-InformationList
                                                UL-DPCH-InformationAddList-RL-ReconfPrepTDD
                                                                                                OPTIONAL,
    ul-DPCH-InformationListLCR
                                               UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    ul-sir-target
                                               UL-SIR
                                                                                                OPTIONAL,
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
                                                                                                OPTIONAL,
    tDD-TPC-UplinkStepSize-LCR
                                               TDD-TPC-UplinkStepSize-LCR
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
   rL-ID
                                               RL-ID
                                                            OPTIONAL,
                                                ProtocolExtensionContainer { { MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
       OPTIONAL,
MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD
                                                                                                                                     PRESENCE
mandatory }
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEOUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
                                          RepetitionLength,
   repetitionLength
   tdd-DPCHOffset
                                          TDD-DPCHOffset,
   uL-Timeslot-Information
                                          UL-Timeslot-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                                  OPTIONAL.
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   tdd-DPCHOffset
                                          TDD-DPCHOffset,
   uL-Timeslot-InformationLCR
                                          UL-TimeslotLCR-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                                     OPTIONAL.
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                              CCTrCH-ID,
    tFCS
                                              TFCS
                                                                                               OPTIONAL,
    tFCI-Coding
                                              TFCI-Coding
                                                                                               OPTIONAL,
   punctureLimit
                                              PunctureLimit
                                              UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
   ul-DPCH-InformationAddList
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
   ul-DPCH-InformationModifyList
                                              UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
   ul-DPCH-InformationDeleteList
                                              UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
                                              ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
```

```
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    EXTENSION
                                                                                    UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    { ID id-UL-SIRTarget
                              CRITICALITY reject
                                                     EXTENSION
                                                                               PRESENCE optional }
                                                                    UL-SIR
    -- Applicable to 1.28Mcps TDD only.
-- This Information is the for the first RL repetition, SIR Target information for RL repetitions 2 and on, should be defined in MultipleRL-UL-
DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD
                                                                           CRITICALITY reject
                                                                                                  EXTENSION TDD-TPC-UplinkStepSize-LCR
   PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
-- This Information is the for the first RL repetition, Step Size information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    { ID id-RL-ID
                                                     CRITICALITY ignore
                                                                                                     PRESENCE optional }
                                                                            EXTENSION
                                                                                           RL-ID
-- This is the RL ID for the first RL repetition
   { ID id-multipleRL-ul-DPCH-InformationModifyList
                                                    CRITICALITY reject
                                                                            EXTENSION
                                                                                           MultipleRL-UL-DPCH-InformationModifyList-RL-
ReconfPrepTDD PRESENCE optional },
-- This DPCH Information is the for the 2nd and beyond RL repetition,
UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
       PRESENCE mandatory }
MultipleRL-UL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-UL-DPCH-InformationModifyListIE-RL-
ReconfPrepTDD
--Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD ::= SEQUENCE {
   ul-DPCH-InformationAddList
                                             UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL.
   ul-DPCH-InformationModifyList
                                             UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
   ul-DPCH-InformationDeleteList
                                             UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
    ul-DPCH-InformationAddListLCR
                                             UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
    ul-sir-target
                                             UL-SIR
                                                         OPTIONAL,
   tDD-TPC-UplinkStepSize-LCR
                                             TDD-TPC-UplinkStepSize-LCR OPTIONAL,
   rL-ID
                                             RL-ID
                                                         OPTIONAL,
-- This DPCH Information is the for the 2nd and beyond RL repetitions,
   iE-Extensions
                                             ProtocolExtensionContainer { { MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs}
       OPTIONAL,
MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
```

```
tdd-DPCHOffset
                                            TDD-DPCHOffset,
    uL-Timeslot-Information
                                            UL-Timeslot-Information.
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    uL-Timeslot-InformationLCR
                                            UL-TimeslotLCR-Information,
                                            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModifyListIEs-RL-ReconfPrepTDD
}}
UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD
                   PRESENCE mandatory }
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod
                                                                OPTIONAL.
    repetitionLength
                                            RepetitionLength
                                                                OPTIONAL,
    tdd-DPCHOffset
                                            TDD-DPCHOffset
                                                                OPTIONAL,
    uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                            UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD
                                                           CRITICALITY reject
                                                                                    EXTENSION UL-TimeslotLCR-InformationModify-ModifyList-RL-
ReconfPrepTDD
                   PRESENCE optional \ . -- Applicable to 1.28Mcps TDD only
    . . .
UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- Applicable to 3.84Mcps TDD only
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
```

```
timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                             OPTIONAL.
    t.FCI-Presence
                                            TFCI-Presence
                                                                OPTIONAL.
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                         UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                                    OPTIONAL.
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
                                            DPCH-ID,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
    . . .
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- Applicable to 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                                OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR
                                                                             UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
        OPTIONAL,
    . . .
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDDLCR
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR
                                                                             OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR-ExtIEs} }
    OPTIONAL,
    . . .
```

```
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR PRESENCE
optional},
UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD
}}
UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD
                   PRESENCE mandatory }
UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
    iE-Extensions
                                                ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                                CCTrCH-ID,
   iE-Extensions
                                                ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEOUENCE {
    cCTrCH-ID
                                                    CCTrCH-ID,
    tFCS
                                                    TFCS.
    tFCI-Coding
                                                    TFCI-Coding,
    punctureLimit
                                                    PunctureLimit,
    cCTrCH-TPCList
                                                    CCTrCH-TPCAddList-RL-ReconfPrepTDD
                                                                                                  OPTIONAL,
    dl-DPCH-InformationList
                                                    DL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
```

```
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationAddList-RL-ReconfPrepTDD
   iE-Extensions
                                                  OPTIONAL.
    . . .
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
                                                                     CRITICALITY reject EXTENSION DL-DPCH-LCR-InformationAddList-RL-
                   PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationAddList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD
                                                                      CRITICALITY ignore EXTENSION DL-Power PRESENCE optional }
-- This DL Power information is the for the first RL repetition, DL power information for RL repetitions 2 and on, should be defined in
MultipleRL-DL-DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD
                                                                      CRITICALITY reject EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional |
-- This DL step size is the for the first RL repetition, DL step size information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                      CRITICALITY ignore EXTENSION DL-Power PRESENCE optional }
-- This DL Power information is the for the first RL repetition, DL power information for RL repetitions 2 and on, should be defined in
MultipleRL-DL-DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                      CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } |
-- This DL Power information is the for the first RL repetition, DL power information for RL repetitions 2 and on, should be defined in
MultipleRL-DL-DPCH-InformationAddList-RL-ReconfPrepTDD
    { ID id-RL-ID
                                                                      CRITICALITY ignore EXTENSION RL-ID PRESENCE optional }
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-ul-DPCH-InformationList
                                                                      CRITICALITY reject EXTENSION MultipleRL-DL-DPCH-InformationAddList-RL-
ReconfPrepTDD PRESENCE optional },
-- This DPCH Information is the for the 2nd and beyond RL repetition,
MultipleRL-DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-DPCH-InformationAddListIE-RL-
--Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD ::= SEQUENCE {
   dl-DPCH-InformationList
                                                              DL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
   dl-DPCH-InformationListLCR
                                                              DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    cCTrCH-Initial-DL-Power
                                                                                               OPTIONAL,
                                                              TDD-TPC-DownlinkStepSize
    tDD-TPC-DownlinkStepSize
                                                                                               OPTIONAL,
    cCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                              DL-Power
                                                                                               OPTIONAL,
    cCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                              DL-Power
                                                                                              OPTIONAL,
   rI.-ID
                                                              RI-TD
                                                                         OPTIONAL,
                                              ProtocolExtensionContainer { { MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
       OPTIONAL,
    . . .
MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
                                                                                                           -- Applicable to 3.84Mcps TDD
only
CCTrCH-TPCAddItem-RL-ReconfPrepTDD
                                 ::= SEQUENCE {
   cCTrCH-ID
   iE-Extensions
                                        ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                   OPTIONAL,
CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}
DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
   TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD
                                                                                                                              PRESENCE
mandatory }
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   dL-Timeslot-Information
                                        DL-Timeslot-Information,
   iE-Extensions
                                        ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                           OPTIONAL.
   . . .
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
   . . .
DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   dL-Timeslot-InformationLCR
                                        DL-TimeslotLCR-Information,
   iE-Extensions
                                        OPTIONAL,
   . . .
DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                                CCTrCH-ID,
   t.FCS
                                                TFCS
                                                                                           OPTIONAL,
   tFCI-Coding
                                                TFCI-Coding
                                                                                           OPTIONAL,
   punctureLimit
                                                PunctureLimit
                                                                                           OPTIONAL,
   cCTrCH-TPCList
                                                CCTrCH-TPCModifyList-RL-ReconfPrepTDD
                                                                                           OPTIONAL,
```

```
dl-DPCH-InformationAddList
                                                    DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    dl-DPCH-InformationModifyList
                                                    DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    dl-DPCH-InformationDeleteList
                                                    DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
                                                    ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                            EXTENSION DL-DPCH-LCR-InformationModify-AddList-RL-
                    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    { ID id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional}
-- This Step Size Information is the for the first RL repetition, step size information for RL repetitions 2 and on, should be defined in
MultipleRL-DL-DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                            CRITICALITY ignore EXTENSION DL-Power
                                                                                                                      PRESENCE optional }
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                            CRITICALITY ignore EXTENSION DL-Power
                                                                                                                       PRESENCE optional }
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
DPCH-InformationModifyList-RL-ReconfPrepTDD
    { ID id-RL-ID
                        CRITICALITY ignore
                                                EXTENSION
                                                                RL-ID
                                                                            PRESENCE optional
                                                                                                } |
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-dl-DPCH-InformationModifyList
                                                        CRITICALITY reject
                                                                                EXTENSION
                                                                                                MultipleRL-DL-DPCH-InformationModifyList-RL-
ReconfPrepTDD PRESENCE optional },
-- This DPCH Information is the for the 2nd and beyond RL repetitions,
    . . .
MultipleRL-DL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-DPCH-InformationModifyListIE-RL-
ReconfPrepTDD
--Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD ::= SEQUENCE {
    dl-DPCH-InformationAddList
                                                                    DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                             OPTIONAL,
    dl-DPCH-InformationModifyList
                                                                    DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                            OPTIONAL,
    dl-DPCH-InformationDeleteList
                                                                    DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                                            OPTIONAL,
    dl-DPCH-InformationAddListLCR
                                                                    DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                            OPTIONAL,
    tDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD
                                                                    TDD-TPC-DownlinkStepSize
                                                                                                                            OPTIONAL,
    cCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                    DL-Power
                                                                                                           OPTIONAL,
                                                                    DL-Power
    cCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                                                           OPTIONAL,
    rL-ID
                                                                    RL-ID
                                                                                OPTIONAL,
    iE-Extensions
                                                                    ProtocolExtensionContainer { { MultipleRL-DL-DPCH-InformationModifyListIE-RL-
ReconfPrepTDD-ExtIEs} }
                            OPTIONAL,
```

```
MultipleRL-DL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
                                     ::= SEOUENCE {
   cCTrCH-ID
   iE-Extensions
                                        OPTIONAL,
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
-- Applicable to 3.84Mcps TDD only
DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
   TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
       PRESENCE mandatory }
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   dL-Timeslot-Information
                                        DL-Timeslot-Information,
                                        ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   dL-Timeslot-InformationLCR
                                        DL-TimeslotLCR-Information,
   iE-Extensions
                                        ProtocolExtensionContainer {    DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModifyListIEs-RL-ReconfPrepTDD
}}
```

```
DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
   { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                         TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD
                  PRESENCE mandatory }
DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod
                                                                   OPTIONAL,
   repetitionLength
                                         RepetitionLength
                                                                   OPTIONAL,
   tdd-DPCHOffset
                                         TDD-DPCHOffset
                                                                   OPTIONAL,
   dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD
                                                                   DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                               OPTIONAL,
   iE-Extensions
                                         ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL.
   . . .
{ ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                              EXTENSION
                                                                     CRITICALITY reject
                                                                                                             DL-Timeslot-LCR-
InformationModify-ModifyList-RL-ReconfPrepTDD
                                                PRESENCE optional },
DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                         ::= SEOUENCE {
   timeSlot
                                         TimeSlot,
   midambleShiftAndBurstType
                                         MidambleShiftAndBurstType
                                                                          OPTIONAL,
   tFCI-Presence
                                         TFCI-Presence
                                                               OPTIONAL,
                                                                   DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
   dL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                            OPTIONAL,
   iE-Extensions
                                         OPTIONAL,
   . . .
DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                              PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only
   { ID id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                              PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                     ::= SEOUENCE {
   dPCH-ID
                                         DPCH-ID,
   tdd-ChannelisationCode
                                         TDD-ChannelisationCode
                                                                   OPTIONAL,
   iE-Extensions
                                         ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                          ::= SEOUENCE {
   timeSlotLCR
                                       TimeSlotLCR,
   midambleShiftLCR
                                       MidambleShiftLCR
                                                             OPTIONAL,
   tFCI-Presence
                                       TFCI-Presence
                                                             OPTIONAL,
   dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                    DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
   OPTIONAL,
   iE-Extensions
                                       ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
       OPTIONAL.
   . . .
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF DL-Code-LCR-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                       ::= SEOUENCE {
   dPCH-ID
                                       DPCH-ID,
   tdd-ChannelisationCodeLCR
                                       TDD-ChannelisationCodeLCR
                                                                    OPTIONAL.
                                       ProtocolExtensionContainer { | DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   optional},
   . . .
DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD
}}
DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
   TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD
                  PRESENCE mandatory }
DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dPCH-ID
                                           ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
```

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```
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEOUENCE {
   cCTrCH-ID
                                                CCTrCH-ID,
                                                ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD
DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dCH-ID
                                            iE-Extensions
                                                                                                                   OPTIONAL,
   . . .
DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD
DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dsch-ID
                                            DSCH-ID.
   cCTrCH-ID
                                            CCTrCH-ID
                                                                  OPTIONAL,
   -- DL CCTrCH in which the DSCH is mapped
   transportFormatSet
                                            TransportFormatSet
                                                                  OPTIONAL,
   allocationRetentionPriority
                                            AllocationRetentionPriority OPTIONAL,
   frameHandlingPriority
                                            FrameHandlingPriority
                                                                  OPTIONAL,
   toAWS
                                            ToAWS
                                                                  OPTIONAL,
   toAWE
                                            ToAWE
                                                                  OPTIONAL,
   transportBearerRequestIndicator
                                            TransportBearerRequestIndicator,
                                            iE-Extensions
                                                                                                                             OPTIONAL,
DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-bindingID
                                    CRITICALITY ignore EXTENSION BindingID
                                                                             PRESENCE
                                                                                        optional }
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                    CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE
                                                                                               optional },
   -- Shall be ignored if bearer establishment with ALCAP.
   . . .
```

```
DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD
DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dsch-ID
   iE-Extensions
                                              ProtocolExtensionContainer { | DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD
USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   uSCH-ID
                                              USCH-ID,
    transportFormatSet
                                              TransportFormatSet
                                                                          OPTIONAL,
                                              AllocationRetentionPriority OPTIONAL,
   allocationRetentionPriority
    cCTrCH-ID
                                              CCTrCH-ID
                                                                          OPTIONAL,
                                                                                      -- UL CCTrCH in which the USCH is mapped
    transportBearerRequestIndicator
                                              TransportBearerRequestIndicator,
   iE-Extensions
                                              ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                                    OPTIONAL,
    . . .
USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                           CRITICALITY ignore
                                                                  EXTENSION BindingID
                                                                                             PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                          CRITICALITY ignore
                                                                  EXTENSION TransportLayerAddress PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-TnlOos
                                           CRITICALITY ignore
                                                                  EXTENSION TnlOos
                                                                                          PRESENCE optional },
    . . .
USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD
USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   uSCH-ID
                                              ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                     OPTIONAL,
USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-Information-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-Information-RL-ReconfPrepTDD
--Includes the 2nd through the max number of radio link information repetitions.
RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
   rL-ID
                                              RL-ID,
   maxDL-Power
                                              DL-Power
                                                                  OPTIONAL,
   minDL-Power
                                              DL-Power
                                                                  OPTIONAL,
   iE-Extensions
                                              OPTIONAL,
```

```
RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID id-Init.DL-Power
                                                                                               PRESENCE optional }
                                                   CRITICALITY ignore EXTENSION DL-Power
     ID id-RL-Specific-DCH-Info
                                                                                                       PRESENCE optional } |
                                                   CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
    { 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
   { ID id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-TimeslotISCPInfoLCR
                                                                                                          PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
    ******************
-- RADIO LINK RECONFIGURATION READY
        ***************
RadioLinkReconfigurationReady ::= SEQUENCE {
                         ProtocolIE-Container
                                                {{RadioLinkReconfigurationReady-IEs}},
   protocolIEs
                         ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
   . . .
RadioLinkReconfigurationReady-IES NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                   CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                             PRESENCE mandatory } |
     ID id-RL-InformationResponseList-RL-ReconfReady
                                                   CRITICALITY ignore TYPE RL-InformationResponseList-RL-ReconfReady PRESENCE optional }
    { ID id-CriticalityDiagnostics
                                                                                                       PRESENCE optional },
                                                   CRITICALITY ignore TYPE CriticalityDiagnostics
   . . .
RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-TargetCommunicationControlPortID
                                            CRITICALITY ignore
                                                                  EXTENSION CommunicationControlPortID
                                                                                                       PRESENCE optional }
    { ID id-HSDSCH-FDD-Information-Response
                                            CRITICALITY ignore
                                                                  EXTENSION HSDSCH-FDD-Information-Response
                                                                                                             PRESENCE optional } |
   -- FDD only
   { ID id-HSDSCH-TDD-Information-Response
                                            CRITICALITY ignore
                                                                  EXTENSION HSDSCH-TDD-Information-Response
                                                                                                             PRESENCE optional }
   -- TDD only
   { ID id-E-DCH-FDD-Information-Response
                                            CRITICALITY ignore
                                                                  EXTENSION E-DCH-FDD-Information-Response
                                                                                                          PRESENCE optional },
   . . .
RL-InformationResponseList-RL-ReconfReady
                                         ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
ReconfReady } }
RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
   rL-ID
   dCH-InformationResponseList-RL-ReconfReady
                                                DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
                                                DSCH-InformationResponseList-RL-ReconfReady OPTIONAL,
   dSCH-InformationResponseList-RL-ReconfReady
```

```
uSCH-InformationResponseList-RL-ReconfReady
                                               USCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
   tFCI2-BearerInformationResponse
                                               TFCI2-BearerInformationResponse
   -- FDD only. There shall be only one TFCI2 bearer per Node B Communication Context.
   iE-Extensions
                                               ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} }
   OPTIONAL,
   . . .
RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator
                                                   CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
                                                                                                                      PRESENCE optional
     ID id-E-DCH-RL-Set-ID
                                                   CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                      PRESENCE optional } |
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                  CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                      PRESENCE optional
DCH-InformationResponseList-RL-ReconfReady: = ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}
DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    TYPE DCH-InformationResponse
                                                                                   PRESENCE mandatory }
DSCH-InformationResponseList-RL-ReconfReady:= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}
DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
USCH-InformationResponseList-RL-ReconfReady: = ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}
USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
     ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse
                                                                                       PRESENCE mandatory }
     ******************
-- RADIO LINK RECONFIGURATION FAILURE
         RadioLinkReconfigurationFailure ::= SEQUENCE {
                         ProtocolIE-Container
                                               {{RadioLinkReconfigurationFailure-IEs}},
   protocolIEs
   protocolExtensions
                         ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}}
                                                                                                 OPTIONAL,
   . . .
RadioLinkReconfigurationFailure-IES NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                           CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                              PRESENCE mandatory
     ID id-CauseLevel-RL-ReconfFailure
                                           CRITICALITY ignore TYPE CauseLevel-RL-ReconfFailure
                                                                                              PRESENCE mandatory
     ID id-CriticalityDiagnostics
                                           CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                           PRESENCE optional },
   . . .
```

```
RadioLinkReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-ReconfFailure ::= CHOICE {
   generalCause
                    GeneralCauseList-RL-ReconfFailure,
   rLSpecificCause
                    RLSpecificCauseList-RL-ReconfFailure,
GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
                                         Cause,
   iE-Extensions
                                         ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} } }
                                                                                                                OPTIONAL
GeneralCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
   rL-ReconfigurationFailureList-RL-ReconfFailure
                                                RL-ReconfigurationFailureList-RL-ReconfFailure
   iE-Extensions
                                                OPTIONAL,
RLSpecificCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-
ReconfigurationFailureItemIE-RL-ReconfFailure}}
RL-ReconfigurationFailureItemIE-RL-ReconfFailure NBAP-PROTOCOL-IES ::= {
   { ID id-RL-ReconfigurationFailureItem-RL-ReconfFailure CRITICALITY ignore TYPE RL-ReconfigurationFailureItem-RL-ReconfFailure PRESENCE
mandatory }
RL-ReconfigurationFailureItem-RL-ReconfFailure ::= SEQUENCE {
   rL-ID
                                         RL-ID,
   cause
                                         Cause,
                                         iE-Extensions
   OPTIONAL,
   . . .
RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK RECONFIGURATION COMMIT
```

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RadioLinkReconfigurationCommit ::= SEQUENCE
   protocolIEs
                        ProtocolIE-Container
                                             {{RadioLinkReconfigurationCommit-IEs}},
                        ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}
   protocolExtensions
                                                                                             OPTIONAL,
RadioLinkReconfigurationCommit-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                             CRITICALITY ignore TYPE NodeB-CommunicationContextID PRESENCE mandatory } |
                                             CRITICALITY ignore TYPE CFN
                                                                                     PRESENCE mandatory }
   { ID
         id-Active-Pattern-Sequence-Information CRITICALITY ignore TYPE Active-Pattern-Sequence-Information PRESENCE optional },
   -- FDD only
   . . .
RadioLinkReconfigurationCommit-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK RECONFIGURATION CANCEL
  ****************
RadioLinkReconfigurationCancel ::= SEQUENCE {
                                             {{RadioLinkReconfigurationCancel-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}
   protocolExtensions
                                                                                             OPTIONAL,
RadioLinkReconfigurationCancel-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                             CRITICALITY
                                                           ignore
                                                                      TYPE
                                                                            NodeB-CommunicationContextID
                                                                                                             PRESENCE mandatory },
   . . .
RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RECONFIGURATION REQUEST FDD
  ******************
RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
                                             {{RadioLinkReconfigurationRequestFDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
```

```
RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                                          CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                           PRESENCE mandatory
} |
     ID id-UL-DPCH-Information-RL-ReconfRqstFDD
                                                          CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                           PRESENCE optional }
                                                                                                                           PRESENCE optional }
     ID id-DL-DPCH-Information-RL-ReconfRgstFDD
                                                          CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRgstFDD
     ID id-FDD-DCHs-to-Modify
                                                          CRITICALITY reject TYPE FDD-DCHs-to-Modify
                                                                                                                PRESENCE optional } |
                                                          CRITICALITY reject TYPE DCH-FDD-Information
                                                                                                                   PRESENCE optional } |
     ID id-DCHs-to-Add-FDD
     ID id-DCH-DeleteList-RL-ReconfRgstFDD
                                                          CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD
                                                                                                                           PRESENCE optional }
     ID id-RL-InformationList-RL-ReconfRqstFDD
                                                          CRITICALITY reject TYPE RL-InformationList-RL-ReconfRqstFDD
                                                                                                                           PRESENCE optional }
     ID id-Transmission-Gap-Pattern-Sequence-Information
                                                         CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE
optional },
    . . .
RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-SignallingBearerRequestIndicator
                                                      CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
                                                                                                                        PRESENCE optional } |
     ID id-HSDSCH-FDD-Information
                                                      CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                  PRESENCE optional } |
     ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised
                                                                                                                                 PRESENCE
optional }
                                                                                                                        PRESENCE optional }
     ID id-HSDSCH-MACdFlows-to-Add
                                                      CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
     ID id-HSDSCH-MACdFlows-to-Delete
                                                      CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                     PRESENCE optional } |
    { ID id-HSDSCH-RNTI
                                                      CRITICALITY reject EXTENSION HSDSCH-RNTI
                                                                                                       PRESENCE conditional }
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
     ID id-HSPDSCH-RL-ID
                                                      CRITICALITY reject EXTENSION RL-ID
                                                                                                       PRESENCE optional } |
     ID id-E-DPCH-Information-RL-ReconfRgstFDD
                                                      CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                        PRESENCE optional }
     ID id-E-DCH-FDD-Information
                                                      CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                   PRESENCE optional }|
                                                                                                                        PRESENCE optional }
     ID id-E-DCH-FDD-Information-to-Modify
                                                      CRITICALITY reject EXTENSION E-DCH-FDD-Information-to-Modify
     ID id-E-DCH-MACdFlows-to-Add
                                                      CRITICALITY reject EXTENSION E-DCH-MACdFlows-Information
                                                                                                                        PRESENCE optional }
                                                                                                                     PRESENCE optional } |
     ID id-E-DCH-MACdFlows-to-Delete
                                                      CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
                                                                                                                PRESENCE optional },
     ID id-Serving-E-DCH-RL-ID
                                                      CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
UL-DPCH-Information-RL-ReconfRgstFDD ::= SEOUENCE {
   ul-TFCS
                                                                  OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } }
                                                                                                                                 OPTIONAL,
UL-DPCH-Information-RL-ReconfRqstFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE conditional
    -- The IE shall be present if E-DPCH Information IE is present
    . . .
DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
   dl-TFCS
                                                  TFCS
                                                                                         OPTIONAL,
    tFCI-SignallingMode
                                                  TFCI-SignallingMode
                                                                                         OPTIONAL,
   limitedPowerIncrease
                                                  LimitedPowerIncrease
                                                                                         OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} }
                                                                                                                                 OPTIONAL,
```

```
DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRgstFDD
DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
   dch-td
                                               DCH-ID,
                                               iE-Extensions
                                                                                                                     OPTIONAL.
DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfRgstFDD}}
RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
          id-RL-InformationItem-RL-ReconfRqstFDD
                                                         CRITICALITY
                                                                                      TYPE RL-InformationItem-RL-ReconfRqstFDD
                                                                        reject
   PRESENCE
              mandatory}
RL-InformationItem-RL-ReconfRqstFDD ::= SEQUENCE
   rL-ID
                                           RL-ID,
   maxDL-Power
                                           DL-Power
                                                         OPTIONAL,
   minDL-Power
                                           DL-Power
                                                         OPTIONAL,
   dl-CodeInformation
                                           FDD-DL-CodeInformation
                                                                    OPTIONAL,
-- The IE shall be present if the Transmission Gap Pattern Sequence Information IE is included and the indicated Downlink Compressed Mode method
for at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
   iE-Extensions
                                           OPTIONAL,
RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DLReferencePower
                                    CRITICALITY ignore
                                                         EXTENSION DL-Power
                                                                                             PRESENCE optional }
                                                                                             PRESENCE optional }
     ID id-RL-Specific-DCH-Info
                                    CRITICALITY ignore
                                                         EXTENSION RL-Specific-DCH-Info
   { ID id-E-DCH-RL-Indication
                                    CRITICALITY reject
                                                         EXTENSION E-DCH-RL-Indication
                                                                                             PRESENCE optional },
E-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
   e-TFCS
   iE-Extensions
                                ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} }
                                                                                                        OPTIONAL,
E-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ **********************
```

```
-- RADIO LINK RECONFIGURATION REQUEST TDD
  *********************
RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
                           ProtocolIE-Container
                                                   {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolIEs
                           ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}
    protocolExtensions
                                                                                                           OPTIONAL.
RadioLinkReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                              CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                             PRESENCE mandatory
} |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                              CRITICALITY notify TYPE UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
    PRESENCE optional }
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                              CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
    PRESENCE optional }
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                              CRITICALITY notify TYPE DL-CCTrCH-InformationModifyList-RL-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 }
     ID id-DCHs-to-Add-TDD
                                                              CRITICALITY reject TYPE DCH-TDD-Information
                                                                                                                       PRESENCE optional } |
     ID id-DCH-DeleteList-RL-ReconfRqstTDD
                                                              CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstTDD
                                                                                                                             PRESENCE optional }
     ID id-RL-Information-RL-ReconfRgstTDD
                                                              CRITICALITY reject TYPE RL-Information-RL-ReconfRqstTDD
                                                                                                                             PRESENCE optional },
-- This RL-Information-RL-ReconfRgstTDD is the first RL information repetition in the RL-Information List. Repetition 2 and on, should be defined
in Multiple-RL-Information-RL-ReconfRgstTDD,
RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-SignallingBearerRequestIndicator
                                                       CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional }
     ID id-multiple-RL-Information-RL-ReconfRqstTDD
                                                                  CRITICALITY reject EXTENSION Multiple-RL-Information-RL-ReconfRqstTDD
    PRESENCE optional } |
--Includes the 2nd through the max number of radio link information repetitions.
     ID id-HSDSCH-TDD-Information
                                                      CRITICALITY reject EXTENSION HSDSCH-TDD-Information
                                                                                                                 PRESENCE optional }
     ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised
                                                                                                                                  PRESENCE
optional }|
     ID id-HSDSCH-MACdFlows-to-Add
                                                       CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                       PRESENCE optional } |
     ID id-HSDSCH-MACdFlows-to-Delete
                                                                                                                    PRESENCE optional }
                                                       CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                     PRESENCE conditional } |
     ID id-HSDSCH-RNTI
                                                       CRITICALITY reject EXTENSION HSDSCH-RNTI
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
    { ID id-HSPDSCH-RL-ID
                                                      CRITICALITY reject EXTENSION RL-ID
                                                                                                     PRESENCE optional },
    . . .
UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}
UL-CCTrCH-InformationModifyItemIE-RL-ReconfRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD
    PRESENCE mandatory}
```

```
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                                    CCTrCH-ID.
    t.FCS
                                                    TFCS
                                                                    OPTIONAL,
    punctureLimit.
                                                    PunctureLimit
                                                                    OPTIONAL.
                                                    ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-UL-SIRTarget
                            CRITICALITY reject
                                                    EXTENSION
                                                                                PRESENCE
                                                                                            optional }.
    -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRgstTDD}}
UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRgstTDD NBAP-PROTOCOL-IES ::= {
          id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                                        CRITICALITY
                                                                                        notify
                                                                                                     TYPE III.-CCTrCH-InformationDeleteItem-RI.-
ReconfRqstTDD
                    PRESENCE
                               mandatory}
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                                    CCTrCH-ID,
    iE-Extensions
                                                    ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs} }
   OPTIONAL,
    . . .
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}
DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
           id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD
                                                                        CRITICALITY
                                                                                        notify
                                                                                                     TYPE DL-CCTrCH-InformationModifyItem-RL-
ReconfRqstTDD
                    PRESENCE
                                mandatory}
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                                    CCTrCH-ID,
    tFCS
                                                    TFCS
                                                                    OPTIONAL,
    punctureLimit
                                                    PunctureLimit
                                                                    OPTIONAL,
   iE-Extensions
                                                    ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
                                                                        CRITICALITY ignore EXTENSION DL-DPCH-LCR-InformationModify-ModifyList-RL-
ReconfRast.TDD
                    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
      ID id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRgstTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                    PRESENCE optional } |
     ID id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRgstTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                   PRESENCE optional },
DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRgstTDD ::= SEOUENCE {
    dL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
                                                                        DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { | DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
                                                              ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfRqstTDD
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD
                                                                 ::= SEOUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    maxPowerLCR
                                            DL-Power
                                                        OPTIONAL,
    minPowerLCR
                                            DL-Power
                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
        OPTIONAL,
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRgstTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfRostTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}
DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
           id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
    { ID
                                                                    CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
    PRESENCE
                mandatory}
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                                    ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD
```

```
DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   dCH-ID
                                            DCH-ID.
   iE-Extensions
                                            OPTIONAL,
   . . .
Multiple-RL-Information-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-Information-RL-ReconfRqstTDD
--Includes the 2nd through the max number of radio link information repetitions.
RL-Information-RL-ReconfRqstTDD ::= SEOUENCE {
   rL-ID
                                        RL-ID.
   maxDL-Power
                                        DL-Power
                                                      OPTIONAL,
                                                      OPTIONAL,
   minDL-Power
                                        DL-Power
   iE-Extensions
                                        OPTIONAL.
RL-InformationItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ID id-RL-Specific-DCH-Info
                                 CRITICALITY ignore
                                                      EXTENSION
                                                                RL-Specific-DCH-Info PRESENCE
    ID id-UL-Synchronisation-Parameters-LCR
                                               CRITICALITY ignore
                                                                    EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                               PRESENCE
             }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
     -- RADIO LINK RECONFIGURATION RESPONSE
  *****************
RadioLinkReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{RadioLinkReconfigurationResponse-IEs}},
                       ProtocolExtensionContainer {{RadioLinkReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                          OPTIONAL,
RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
         id-CRNC-CommunicationContextID
   { ID
                                                   CRITICALITY ignore
                                                                       TYPE
                                                                              CRNC-CommunicationContextID
                                                                                                                    PRESENCE
   mandatory } |
   { ID
         id-RL-InformationResponseList-RL-ReconfRsp
                                                   CRITICALITY ignore
                                                                       TYPE
                                                                              RL-InformationResponseList-RL-ReconfRsp
                                                                                                                      PRESENCE
   optional
   { ID
         id-CriticalityDiagnostics
                                                   CRITICALITY ignore
                                                                       TYPE
                                                                              CriticalityDiagnostics
                                                                                                                 PRESENCE
   optional },
   . . .
RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::=
     ID id-TargetCommunicationControlPortID
                                                             EXTENSION CommunicationControlPortID
                                        CRITICALITY ignore
                                                                                               PRESENCE optional }
    ID id-HSDSCH-FDD-Information-Response
                                        CRITICALITY ignore
                                                             EXTENSION HSDSCH-FDD-Information-Response
                                                                                                     PRESENCE optional }
```

```
-- FDD only
    { ID id-HSDSCH-TDD-Information-Response
                                              CRITICALITY ignore
                                                                     EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                  PRESENCE optional } |
    -- TDD only
    { ID id-E-DCH-FDD-Information-Response
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-FDD-Information-Response
                                                                                                               PRESENCE optional },
RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-
ReconfRsp } }
RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
           id-RL-InformationResponseItem-RL-ReconfRsp
                                                             CRITICALITY
                                                                             ignore
                                                                                            TYPE RL-InformationResponseItem-RL-ReconfRsp
    PRESENCE
               mandatory}
RL-InformationResponseItem-RL-ReconfRsp ::= SEOUENCE {
                                              RL-ID,
                                                                                                               OPTIONAL,
   dCH-InformationResponseList-RL-ReconfRsp
                                              DCH-InformationResponseList-RL-ReconfRsp
                                              ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfRsp-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-UpdatedIndicator
                                                     CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
                                                                                                                             PRESENCE optional
    -- FDD only
                                                                                                            PRESENCE optional }|
     ID id-E-DCH-RL-Set-ID
                                                      CRITICALITY ignore EXTENSION RL-Set-ID
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                     CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                             PRESENCE optional
DCH-InformationResponseList-RL-ReconfRsp::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}
DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
     ID id-DCH-InformationResponse CRITICALITY ignore
                                                         TYPE DCH-InformationResponse
                                                                                        PRESENCE mandatory }
       ***************
-- RADIO LINK DELETION REQUEST
  RadioLinkDeletionRequest ::= SEOUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{RadioLinkDeletionRequest-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}}
RadioLinkDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID
           id-NodeB-CommunicationContextID
                                                         CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                       PRESENCE mandatory } |
     ID
           id-CRNC-CommunicationContextID
                                                         CRITICALITY reject TYPE CRNC-CommunicationContextID
                                                                                                                    PRESENCE mandatory } |
     ID
           id-RL-informationList-RL-DeletionRqst
                                                         CRITICALITY notify TYPE RL-informationList-RL-DeletionRqst
                                                                                                                       PRESENCE mandatory },
```

```
RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}
RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
        id-RL-informationItem-RL-DeletionRqst
                                                 CRITICALITY
                                                              notify
                                                                           TYPE RL-informationItem-RL-DeletionRqst
   PRESENCE mandatory}
RL-informationItem-RL-DeletionRgst ::= SEQUENCE {
                                       RL-ID,
   iE-Extensions
                                       RL-informationItem-RL-DeletionRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- RADIO LINK DELETION RESPONSE
__ ********************************
RadioLinkDeletionResponse ::= SEQUENCE {
              ProtocolIE-Container
   protocolIEs
                                          {{RadioLinkDeletionResponse-IEs}},
   protocolExtensions ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}
                                                                                   OPTIONAL,
RadioLinkDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
         id-CRNC-CommunicationContextID
                                          CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                               PRESENCE mandatory } |
   { ID
         id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                          PRESENCE optional },
   . . .
RadioLinkDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ******************
-- DL POWER CONTROL REQUEST FDD
__ ********************************
DL-PowerControlRequest ::= SEQUENCE {
```

```
ProtocolIE-Container
                                                  {{DL-PowerControlRequest-IEs}},
   protocolIEs
   protocolExtensions
                           ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
                                                                                               OPTIONAL.
DL-PowerControlRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                              CRITICALITY ignore TYPE
                                                                         NodeB-CommunicationContextID
                                                                                                          PRESENCE mandatory
     ID id-PowerAdiustmentType
                                              CRITICALITY ignore TYPE PowerAdjustmentType
                                                                                                  PRESENCE mandatory }
    { ID id-DLReferencePower
                                              CRITICALITY ignore TYPE DL-Power
                                                                                                  PRESENCE conditional }
    -- This IE shall be present if the Adjustment Type IE is set to 'Common'
    { ID id-InnerLoopDLPCStatus
                                              CRITICALITY ignore TYPE InnerLoopDLPCStatus
                                                                                                  PRESENCE optional }
    { ID id-DLReferencePowerList-DL-PC-Rqst
                                              CRITICALITY ignore TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Individual'
   { ID id-MaxAdjustmentStep
                                              CRITICALITY ignore TYPE MaxAdjustmentStep
                                                                                                  PRESENCE conditional }
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
   { ID id-AdjustmentPeriod
                                              CRITICALITY ignore TYPE AdjustmentPeriod
                                                                                                  PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
                                              CRITICALITY ignore TYPE ScaledAdjustmentRatio
                                                                                                  PRESENCE conditional },
   { ID id-AdjustmentRatio
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-ReferencePowerInformationList-DL-PC-Rgst ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-
ReferencePowerInformationItemIE-DL-PC-Rgst }}
DL-ReferencePowerInformationItemIE-DL-PC-Rgst NBAP-PROTOCOL-IES ::= {
    { ID id-DL-ReferencePowerInformationItem-DL-PC-Rgst
                                                                           ignore
                                                                                             DL-ReferencePowerInformationItem-DL-PC-Rgst
    PRESENCE
               mandatory
DL-ReferencePowerInformationItem-DL-PC-Rqst ::= SEQUENCE {
   dl-ReferencePower
                                          DL-Power,
                                          ProtocolExtensionContainer { { DL-ReferencePowerInformationItem-DL-PC-Rgst-ExtIEs } }
   iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ******************
-- DL POWER TIMESLOT CONTROL REQUEST TDD
      **********************
DL-PowerTimeslotControlRequest ::= SEQUENCE
                                                  {{DL-PowerTimeslotControlRequest-IEs}},
   protocolIEs
                           ProtocolIE-Container
```

```
ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}
   protocolExtensions
                                                                                                  OPTIONAL,
DL-PowerTimeslotControlRequest-IES NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                                CRITICALITY ignore
                                                                                 NodeB-CommunicationContextID
                                                                         TYPE
                                                                                                                     PRESENCE mandatory
    { ID id-TimeslotISCPInfo
                                 CRITICALITY ignore
                                                           TYPE
                                                                  DL-TimeslotISCPInfo
                                                                                        PRESENCE optional },
   -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TimeslotISCPInfoList-LCR-DL-PC-RgstTDD
                                                                                                               PRESENCE optional } |
                                                   CRITICALITY ignore
                                                                             EXTENSION DL-TimeslotISCPInfoLCR
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
     ID id-PrimCCPCH-RSCP-DL-PC-RgstTDD
                                                   CRITICALITY ignore
                                                                             EXTENSION PrimaryCCPCH-RSCP
                                                                                                          PRESENCE optional }
    { ID id-PrimaryCCPCH-RSCP-Delta
                                                   CRITICALITY ignore
                                                                             EXTENSION PrimaryCCPCH-RSCP-Delta PRESENCE optional },
  DEDICATED MEASUREMENT INITIATION REQUEST
        ****************
DedicatedMeasurementInitiationRequest ::= SEQUENCE
                                                {{DedicatedMeasurementInitiationRequest-IEs}},
   protocolIEs
                         ProtocolIE-Container
                         ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                       OPTIONAL,
   . . .
DedicatedMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                                CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                       PRESENCE mandatory }
     ID id-MeasurementID
                                                CRITICALITY reject TYPE MeasurementID
                                                                                               PRESENCE mandatory }
     PRESENCE mandatory }
     ID id-DedicatedMeasurementType
                                                CRITICALITY reject TYPE DedicatedMeasurementType
                                                                                                     PRESENCE mandatory }
     ID id-MeasurementFilterCoefficient
                                                CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                       PRESENCE optional } |
     ID id-ReportCharacteristics
                                                CRITICALITY reject TYPE ReportCharacteristics
                                                                                                  PRESENCE mandatory } |
     ID id-CFNReportingIndicator
                                                                                               PRESENCE mandatory } |
                                                CRITICALITY reject TYPE FNReportingIndicator
    ID id-CFN
                                                CRITICALITY reject TYPE CFN
                                                                                               PRESENCE optional } ,
   . . .
DedicatedMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
          id-NumberOfReportedCellPortions CRITICALITY reject EXTENSION NumberOfReportedCellPortions PRESENCE conditional }
   -- The IE shall be present if the Dedicated Measurement Type IE is set to 'Best Cell Portions', FDD only.
          id-MeasurementRecoveryBehavior
                                                   CRITICALITY ignore
                                                                                 EXTENSION MeasurementRecoveryBehavior
                                                                                                                        PRESENCE optional
   },
DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
```

```
rL
                            RL-DM-Rqst,
   rLS
                            RL-Set-DM-Rgst,
                                                  -- for FDD only
   all-RL
                            AllRL-DM-Rast.
   all-RLS
                            AllRL-Set-DM-Rgst,
                                                  -- for FDD only
   . . .
RL-DM-Rqst ::= SEQUENCE {
   rL-InformationList
                                    RL-InformationList-DM-Rqst,
                                    ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } }
   iE-Extensions
                                                                                          OPTIONAL,
RLItem-DM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rgst ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rgst }}
RL-InformationItemIE-DM-Rgst NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RL-InformationItem-DM-Rgst ::= SEOUENCE {
       rL-ID
                                    RL-ID,
       dPCH-ID
                                                      OPTIONAL, -- for TDD only
                                    iE-Extensions
                                                                                                     OPTIONAL,
RL-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-PUSCH-Info-DM-Rqst
                                CRITICALITY reject
                                                             EXTENSION
                                                                                             PRESENCE optional } |
                                                                        PUSCH-Info-DM-Rqst
   -- TDD only
   { ID id-HSSICH-Info-DM-Rqst
                                CRITICALITY reject
                                                                                             PRESENCE optional },
                                                             EXTENSION
                                                                       HSSICH-Info-DM-Rqst
   -- TDD only
   . . .
PUSCH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
HSSICH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID
RL-Set-DM-Rqst ::= SEQUENCE {
                                       RL-Set-InformationList-DM-Rqst,
   rL-Set-InformationList-DM-Rqst
                                       ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } }
   iE-Extensions
RL-SetItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rqst
                                           ::= SEQUENCE (SIZE(1..maxNrOfRLSets)) OF RL-Set-InformationItem-DM-Rqst
```

```
RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
   rL-Set-ID
                               RL-Set-ID.
   iE-Extensions
                               ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rgst-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AllRL-DM-Rqst ::= NULL
AllRL-Set-DM-Rgst ::= NULL
    ****************
-- DEDICATED MEASUREMENT INITIATION RESPONSE
__ *********************
DedicatedMeasurementInitiationResponse ::= SEQUENCE {
                        ProtocolIE-Container
                                              {{DedicatedMeasurementInitiationResponse-IEs}},
   protocolIEs
                        ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}
   protocolExtensions
                                                                                                   OPTIONAL,
DedicatedMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                              CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                 PRESENCE mandatory }
     ID id-MeasurementID
                                              CRITICALITY ignore TYPE MeasurementID
                                                                                         PRESENCE mandatory }
     PRESENCE optional } |
   { ID id-CriticalityDiagnostics
                                              CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                          PRESENCE optional },
   . . .
DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
          id-MeasurementRecoverySupportIndicator
                                                 CRITICALITY ignore
                                                                      EXTENSION MeasurementRecoverySupportIndicator PRESENCE optional
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
   rL
                            RL-DM-Rsp,
   rLS
                            RL-Set-DM-Rsp, -- for FDD only
   all-RL
                            RL-DM-Rsp,
   all-RLS
                            RL-Set-DM-Rsp, -- for FDD only
   . . .
RL-DM-Rsp ::= SEQUENCE {
   rL-InformationList-DM-Rsp
                                   RL-InformationList-DM-Rsp,
   iE-Extensions
                                   ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } } OPTIONAL,
```

```
RLItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}
RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
RL-InformationItem-DM-Rsp ::= SEQUENCE {
   rL-ID
                                    RL-ID,
   dPCH-ID
                                    DPCH-ID
                                                   OPTIONAL,
                                                              -- for TDD only
   dedicatedMeasurementValue
                                    DedicatedMeasurementValue,
                                                   OPTIONAL,
                                    iE-Extensions
                                                                                                       OPTIONAL,
RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-PUSCH-Info-DM-Rsp
                                                                                            PRESENCE optional } |
                                CRITICALITY reject
                                                              EXTENSION
                                                                         PUSCH-Info-DM-Rsp
   -- TDD only
                                                                                            PRESENCE optional },
   {ID id-HSSICH-Info-DM-Rsp
                                 CRITICALITY reject
                                                              EXTENSION
                                                                        HS-SICH-ID
   -- TDD only
   . . .
PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
RL-Set-DM-Rsp ::= SEQUENCE {
   rL-Set-InformationList-DM-Rsp
                                    RL-Set-InformationList-DM-Rsp,
   iE-Extensions
                                    ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } }
                                                                                              OPTIONAL,
RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}
RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp
                                           CRITICALITY ignore
                                                                  TYPE RL-Set-InformationItem-DM-Rsp PRESENCE mandatory }
RL-Set-InformationItem-DM-Rsp ::= SEOUENCE
   rL-Set-ID
                                 RL-Set-ID,
   dedicatedMeasurementValue
                                 DedicatedMeasurementValue,
   iE-Extensions
                                 ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
   . . .
```

```
RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- DEDICATED MEASUREMENT INITIATION FAILURE
           DedicatedMeasurementInitiationFailure ::= SEQUENCE {
                                          {{DedicatedMeasurementInitiationFailure-IEs}},
   protocolIEs
                      ProtocolIE-Container
   protocolExtensions
                      ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
                                                                                            OPTIONAL.
DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
                                          CRITICALITY
         id-CRNC-CommunicationContextID
                                                                                                      PRESENCE mandatory
                                                        ignore
                                                                     TYPE
                                                                           CRNC-CommunicationContextID
         id-MeasurementID
    ID
                                          CRITICALITY
                                                        ignore
                                                                     TYPE
                                                                            MeasurementID
                                                                                               PRESENCE mandatory } |
    TD
         id-Cause
                                          CRITICALITY
                                                        ignore
                                                                     TYPE
                                                                           Cause
                                                                                       PRESENCE mandatory
         id-CriticalityDiagnostics
   { ID
                                                                     TYPE
                                                                           CriticalityDiagnostics
                                                                                                      PRESENCE optional },
                                          CRITICALITY
                                                        ignore
DedicatedMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     -- DEDICATED MEASUREMENT REPORT
  ****************
DedicatedMeasurementReport ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                         {{DedicatedMeasurementReport-IEs}},
                      ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}
   protocolExtensions
                                                                                  OPTIONAL,
DedicatedMeasurementReport-IES NBAP-PROTOCOL-IES ::= {
    ID id-CRNC-CommunicationContextID
                                          CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                          PRESENCE mandatory
    ID id-MeasurementID
                                          CRITICALITY ignore TYPE MeasurementID
                                                                                  PRESENCE mandatory }
    DedicatedMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
         id-MeasurementRecoveryReportingIndicator
   { ID
                                                 CRITICALITY ignore
                                                                     EXTENSION
                                                                              MeasurementRecoveryReportingIndicator
                                                                                                               PRESENCE
optional
   },
   . . .
```

```
DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
                                 RL-DM-Rort.
   rLS
                                 RL-Set-DM-Rprt,
                                                      -- for FDD only
   all-RL
                                 RL-DM-Rprt,
                                                      -- for FDD only
   all-RLS
                                 RL-Set-DM-Rprt,
RL-DM-Rprt ::= SEQUENCE {
   rL-InformationList-DM-Rprt
                                 RL-InformationList-DM-Rprt,
   iE-Extensions
                                 OPTIONAL,
   . . .
RLItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rprt }}
RL-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RL-InformationItem-DM-Rprt ::= SEQUENCE {
   rL-ID
                              RL-ID,
   dPCH-ID
                              DPCH-ID
                                        OPTIONAL,
                                                      -- for TDD only
   dedicatedMeasurementValueInformation
                                    DedicatedMeasurementValueInformation,
                              iE-Extensions
                                                                                            OPTIONAL,
   . . .
RL-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-PUSCH-Info-DM-Rprt
                              CRITICALITY reject
                                                         EXTENSION
                                                                   PUSCH-Info-DM-Rort
                                                                                       PRESENCE optional |
   -- TDD only
   {ID id-HSSICH-Info-DM-Rprt
                              CRITICALITY reject
                                                         EXTENSION
                                                                   HS-SICH-ID
                                                                                     PRESENCE optional },
   -- TDD only
PUSCH-Info-DM-Rprt ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID
RL-Set-DM-Rprt ::= SEQUENCE {
   rL-Set-InformationList-DM-Rort
                                 RL-Set-InformationList-DM-Rprt,
   iE-Extensions
                                 OPTIONAL,
   . . .
RL-SetItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rprt }}
```

```
RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
   rL-Set-ID
                               RL-Set-ID,
   dedicatedMeasurementValueInformation DedicatedMeasurementValueInformation.
                              ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  DEDICATED MEASUREMENT TERMINATION REQUEST
     DedicatedMeasurementTerminationRequest ::= SEQUENCE
   protocolIEs
                        ProtocolIE-Container
                                             {{DedicatedMeasurementTerminationRequest-IEs}},
                       ProtocolExtensionContainer {{DedicatedMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                OPTIONAL,
DedicatedMeasurementTerminationRequest-IES NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                            CRITICALITY
                                                          ignore
                                                                        TYPE
                                                                               NodeB-CommunicationContextID
                                                                                                           PRESENCE mandatory
   { ID
          id-MeasurementID
                                            CRITICALITY
                                                                        TYPE
                                                                                                   PRESENCE mandatory },
                                                          ignore
                                                                               MeasurementID
   . . .
DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ********************
-- DEDICATED MEASUREMENT FAILURE INDICATION
    DedicatedMeasurementFailureIndication ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                             {{DedicatedMeasurementFailureIndication-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}
                                                                                                 OPTIONAL,
DedicatedMeasurementFailureIndication-IES NBAP-PROTOCOL-IES ::=
    ID
         id-CRNC-CommunicationContextID
                                                                 TYPE
                                         CRITICALITY
                                                                        CRNC-CommunicationContextID
                                                                                                   PRESENCE mandatory }
                                                       ignore
    ID
          id-MeasurementID
                                         CRITICALITY
                                                       ignore
                                                                 TYPE
                                                                        MeasurementID
                                                                                      PRESENCE mandatory
```

```
PRESENCE mandatory },
   { ID
           id-Cause
                                              CRITICALITY
                                                              ignore
                                                                          TYPE
                                                                                  Cause
DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK FAILURE INDICATION
__ **********************
RadioLinkFailureIndication ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                  {{RadioLinkFailureIndication-IEs}},
                          ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}
   protocolExtensions
                                                                                                 OPTIONAL,
RadioLinkFailureIndication-IES NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                      CRITICALITY ignore
                                                                                  TYPE CRNC-CommunicationContextID
                                                                                                                         PRESENCE mandatory
    { ID
           id-Reporting-Object-RL-FailureInd
                                                      CRITICALITY ignore
                                                                                  TYPE Reporting-Object-RL-FailureInd
                                                                                                                         PRESENCE mandatory
RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Reporting-Object-RL-FailureInd ::= CHOICE {
   rL
                           RL-RL-FailureInd,
   rL-Set
                           RL-Set-RL-FailureInd, --FDD only
   cCTrCH
                          CCTrCH-RL-FailureInd --TDD only
RL-RL-FailureInd ::= SEOUENCE {
   rL-InformationList-RL-FailureInd
                                          RL-InformationList-RL-FailureInd,
                                          ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs } } OPTIONAL,
   iE-Extensions
RLItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}
RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID
          id-RL-InformationItem-RL-FailureInd
                                                      CRITICALITY
                                                                                     TYPE
                                                                                             RL-InformationItem-RL-FailureInd
                                                                                                                                     PRESENCE
                                                                      ignore
   mandatory}
```

```
RL-InformationItem-RL-FailureInd ::= SEQUENCE {
                                              RL-ID,
    cause
                                              Cause,
                                              ProtocolExtensionContainer { { RL-InformationItem-RL-FailureInd-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
RL-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-RL-FailureInd ::= SEQUENCE {
   rL-Set-InformationList-RL-FailureInd
                                          RL-Set-InformationList-RL-FailureInd,
   iE-Extensions
                                          ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } }
                                                                                                               OPTIONAL,
RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-FailureInd ::= SEOUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
FailureInd }}
RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    TYPE RL-Set-InformationItem-RL-FailureInd
                                                                                                                    PRESENCE mandatory }
RL-Set-InformationItem-RL-FailureInd ::= SEQUENCE {
   rL-Set-ID
                          RL-Set-ID,
    cause
                           Cause,
                          ProtocolExtensionContainer { { RL-Set-InformationItem-RL-FailureInd-ExtIEs} } OPTIONAL,
    iE-Extensions
RL-Set-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-RL-FailureInd ::= SEQUENCE {
                                              RL-ID,
    cCTrCH-InformationList-RL-FailureInd
                                              CCTrCH-InformationList-RL-FailureInd,
                                          ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }
   iE-Extensions
                                                                                                               OPTIONAL,
CCTrCHItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd}}
```

```
CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
        id-CCTrCH-InformationItem-RL-FailureInd
                                                CRITICALITY
                                                             ignore
                                                                          TYPE CCTrCH-InformationItem-RL-FailureInd
   PRESENCE
            mandatory}
CCTrCH-InformationItem-RL-FailureInd ::= SEOUENCE {
   cCTrCH-ID
                                      CCTrCH-ID,
   cause
                                      Cause,
                                      ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } }
   iE-Extensions
                                                                                                         OPTIONAL,
CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    *****************
-- RADIO LINK PREEMPTION REQUIRED INDICATION
__ *********************
RadioLinkPreemptionRequiredIndication ::= SEOUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                   {{RadioLinkPreemptionRequiredIndication-IEs}},
   protocolExtensions
                             ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
                                                                                                            OPTIONAL,
RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
   { ID
        id-CRNC-CommunicationContextID
                                                CRITICALITY
                                                             ignore
                                                                          TYPE CRNC-CommunicationContextID
                                                                                                              PRESENCE
   mandatory
   . . .
RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
                                         ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIE-RL-
RL-InformationList-RL-PreemptRequiredInd
PreemptRequiredInd}}
RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory },
RL-InformationItem-RL-PreemptRequiredInd::= SEQUENCE {
   rL-ID
   iE-Extensions
                         ProtocolExtensionContainer { {RL-InformationItem-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
```

```
RL-InformationItem-RL-PreemptRequiredInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK RESTORE INDICATION
*****************
RadioLinkRestoreIndication ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                           {{RadioLinkRestoreIndication-IEs}},
   protocolExtensions
                     ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}
                                                                                    OPTIONAL.
RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
         id-CRNC-CommunicationContextID
                                           CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                            PRESENCE mandatory
         id-Reporting-Object-RL-RestoreInd
                                           CRITICALITY ignore TYPE Reporting-Object-RL-RestoreInd
   { ID
                                                                                              PRESENCE mandatory },
RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Reporting-Object-RL-RestoreInd ::= CHOICE {
                       RL-RL-RestoreInd, --TDD only
   rL-Set
                       RL-Set-RL-RestoreInd, --FDD only
   . . . .
   cCTrCH
                       CCTrCH-RL-RestoreInd --TDD only
RL-RL-RestoreInd ::= SEOUENCE {
   rL-InformationList-RL-RestoreInd
                                    RL-InformationList-RL-RestoreInd,
   iE-Extensions
                                    RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationItemIE-RL-RestoreInd}}
RL-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
       id-RL-InformationItem-RL-RestoreInd
                                           CRITICALITY ignore
                                                               TYPE RL-InformationItem-RL-RestoreInd
                                                                                                        PRESENCE mandatory }
RL-InformationItem-RL-RestoreInd ::= SEQUENCE {
   rL-ID
   iE-Extensions
```

```
RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-RL-RestoreInd ::= SEQUENCE {
   rL-Set-InformationList-RL-RestoreInd
                                     RL-Set-InformationList-RL-RestoreInd,
   iE-Extensions
                                     ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } }
                                                                                                  OPTIONAL,
RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
RestoreInd }}
RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory }
RL-Set-InformationItem-RL-RestoreInd ::= SEOUENCE {
   rL-Set-ID
                       RL-Set-ID,
   iE-Extensions
                       ProtocolExtensionContainer { { RL-Set-InformationItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
CCTrCH-RL-RestoreInd ::= SEQUENCE {
                                         RL-ID,
   cCTrCH-InformationList-RL-RestoreInd
                                         CCTrCH-InformationList-RL-RestoreInd,
   iE-Extensions
                                     ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }
                                                                                                  OPTIONAL,
CCTrCHitem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-RestoreInd ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
RestoreInd}}
CCTrCH-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
   cCTrCH-ID
                                            CCTrCH-ID,
   iE-Extensions
```

```
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- COMPRESSED MODE COMMAND FDD
  ****************
CompressedModeCommand ::= SEQUENCE {
                                             {{CompressedModeCommand-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}
                                                                                                 OPTIONAL,
CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
         id-NodeB-CommunicationContextID
                                             CRITICALITY
                                                               ignore
                                                                         TYPE
                                                                                NodeB-CommunicationContextID
                                                                                                                  PRESENCE
         id-Active-Pattern-Sequence-Information CRITICALITY
                                                               ignore
                                                                         TYPE
                                                                                Active-Pattern-Sequence-Information
                                                                                                                 PRESENCE
mandatory },
CompressedModeCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ****************
-- ERROR INDICATION
ErrorIndication ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{ErrorIndication-IEs}},
                        ProtocolExtensionContainer {{ErrorIndication-Extensions}}
   protocolExtensions
                                                                                OPTIONAL,
ErrorIndication-IEs NBAP-PROTOCOL-IES ::= {
         id-CRNC-CommunicationContextID
                                         CRITICALITY
                                                       ignore
                                                                     TYPE
                                                                             CRNC-CommunicationContextID
                                                                                                          PRESENCE optional }
         id-NodeB-CommunicationContextID
                                         CRITICALITY
                                                        ignore
                                                                      TYPE
                                                                             NodeB-CommunicationContextID
                                                                                                          PRESENCE optional }
     ID
          id-Cause
                                                        ignore
                                                                                          PRESENCE optional } |
                                         CRITICALITY
                                                                     TYPE
    ID
          id-CriticalityDiagnostics
                                         CRITICALITY
                                                        ignore
                                                                      TYPE
                                                                             CriticalityDiagnostics
                                                                                                       PRESENCE optional },
   . . .
ErrorIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
-- PRIVATE MESSAGE
PrivateMessage ::= SEQUENCE {
                PrivateIE-Container {{PrivateMessage-IEs}},
   privateIEs
PrivateMessage-IEs NBAP-PRIVATE-IES ::= {
        ******************
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST FDD
  ***************
PhysicalSharedChannelReconfigurationRequestFDD ::= SEOUENCE {
                      ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestFDD-IEs}},
   protocolIEs
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestFDD-Extensions}}
                                                                                                                OPTIONAL.
PhysicalSharedChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                         CRITICALITY reject TYPE C-ID
                                                                                                        PRESENCE mandatory } |
     ID id-ConfigurationGenerationID
                                                         CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                      PRESENCE mandatory } |
                                                         CRITICALITY reject TYPE SFN
                                                                                                        PRESENCE optional } |
                                                                                                                   PRESENCE optional }
     ID id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst
                                                         CRITICALITY reject TYPE MaximumTransmissionPower
     ID id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst CRITICALITY reject TYPE DL-ScramblingCode
                                                                                                             PRESENCE optional }
                                                                                                                         PRESENCE optional } |
     ID id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst CRITICALITY reject TYPE HS-PDSCH-FDD-Code-Information
                                                         CRITICALITY reject TYPE HS-SCCH-FDD-Code-Information
    { ID id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst
                                                                                                                         PRESENCE optional },
    . . .
PhysicalSharedChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                            CRITICALITY reject EXTENSION DL-ScramblingCode
                                                                                                                                    PRESENCE
optional }|
    { ID id-E-AGCH-FDD-Code-Information
                                                            CRITICALITY reject EXTENSION E-AGCH-FDD-Code-Information
    PRESENCE optional }
    { ID id-E-RGCH-E-HICH-FDD-Code-Information
                                                            CRITICALITY reject EXTENSION E-RGCH-E-HICH-FDD-Code-Information
    PRESENCE optional } |
    {ID id-HSDPA-CellPortion-InformationList-PSCH-ReconfRqst
                                                           CRITICALITY reject EXTENSION HSDPA-CellPortion-InformationList-PSCH-ReconfRqst
   PRESENCE optional },
    . . .
HSDPA-CellPortion-InformationList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF ProtocolIE-Single-Container ( HSDPA-
CellPortion-InformationItemIE-PSCH-ReconfRqst }}
```

```
HSDPA-CellPortion-InformationItemIE-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    ID id-HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst CRITICALITY reject TYPE HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst
    PRESENCE mandatory
HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst::= SEQUENCE {
   cellPortionID
                                                      CellPortionID,
   hS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst
                                                      DL-ScramblingCode
                                                                                          OPTIONAL,
                                                      HS-PDSCH-FDD-Code-Information
   hS-PDSCH-FDD-Code-Information-PSCH-ReconfRgst
                                                                                          OPTIONAL,
   hS-SCCH-FDD-Code-Information-PSCH-ReconfRqst
                                                      HS-SCCH-FDD-Code-Information
                                                                                          OPTIONAL,
   iE-Extensions
                                                       ProtocolExtensionContainer { { HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
  PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
                      ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                                   OPTIONAL,
PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                   CRITICALITY reject TYPE C-ID
                                                                                                  PRESENCE mandatory } |
     ID id-SFN
                                                   CRITICALITY reject TYPE SFN
                                                                                                  PRESENCE optional } |
     ID id-PDSCHSets-AddList-PSCH-ReconfRqst
                                                   CRITICALITY reject TYPE PDSCHSets-AddList-PSCH-ReconfRqst
                                                                                                                 PRESENCE optional } |
     ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst
                                                   CRITICALITY reject TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst
                                                                                                                    PRESENCE optional }
     ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst
                                                                                                                    PRESENCE optional }
                                                   CRITICALITY reject TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst
     ID id-PUSCHSets-AddList-PSCH-ReconfRqst
                                                   CRITICALITY reject TYPE PUSCHSets-AddList-PSCH-ReconfRqst
                                                                                                                 PRESENCE optional } |
     ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                   CRITICALITY reject TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                                                                                    PRESENCE optional }
                                                   CRITICALITY reject TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst
                                                                                                                    PRESENCE optional },
     ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst
    . . .
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::=
    { ID id-HS-PDSCH-TDD-Information-PSCH-ReconfRgst
                                                              CRITICALITY reject EXTENSION HS-PDSCH-TDD-Information-PSCH-ReconfRgst
    PRESENCE optional }
    { ID id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
                                                              CRITICALITY reject EXTENSION Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
    PRESENCE optional }
    { ID id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRgst
                                                              CRITICALITY reject EXTENSION Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
    PRESENCE optional }
    { ID id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
                                                              CRITICALITY reject EXTENSION Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
    PRESENCE optional } |
    { ID id-ConfigurationGenerationID
                                                           CRITICALITY reject EXTENSION ConfigurationGenerationID
                                                                                                                          PRESENCE optional },
```

```
PDSCHSets-AddList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRgst
PDSCHSets-AddItem-PSCH-ReconfRqst
                                     ::= SEOUENCE {
   pDSCHSet-ID
                                                PDSCHSet-ID,
    pDSCH-InformationList
                                                PDSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL, -- Mandatory for 3.84Mcps TDD. Not
Applicable to 1.28Mcps TDD
   iE-Extensions
                                                ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } }
PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst
                                                        CRITICALITY reject
                                                                                EXTENSION
                                                                                            PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE
                optional \, -- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD
    . . .
PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}
-- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRgst CRITICALITY reject
                                                                                TYPE
                                                                                        PDSCH-Information-AddItem-PSCH-ReconfRgst
                                                                                                                                         PRESENCE
    mandatory}
PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-PSCH-ReconfRqst
                                                                DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions
                                            ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                   OPTIONAL,
    . . .
PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst
DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-InformationAddList-PSCH-ReconfRgst
                                                            DL-Code-InformationAddList-PSCH-ReconfRgst,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                         OPTIONAL,
    . . .
DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEOUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst
DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE
                                            PDSCH-ID.
    pDSCH-ID
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
                                            ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL.
DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst
                                                                    DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
                                                ProtocolExtensionContainer { {PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ID id-Tstd-indicator
                                CRITICALITY reject
                                                                                         PRESENCE optional },
                                                        EXTENSION TSTD-Indicator
    -- Applicable to 1.28Mcps TDD only
DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst
DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-InformationAddList-LCR-PSCH-ReconfRgst
                                                                DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
                                            ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst
DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID
                                            PDSCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                         OPTIONAL,
```

```
DL-Code-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst
PDSCHSets-ModifyItem-PSCH-ReconfRast
                                      ::= SEOUENCE {
   pDSCHSet-ID
                                             PDSCHSet-ID,
   pDSCH-InformationList
                                             PDSCH-Information-ModifyList-PSCH-ReconfRqst,
                                             ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                       OPTIONAL,
   . . .
PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}
PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
   PRESENCE
   optional}|
   {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRgst
                                                        CRITICALITY reject TYPE PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRgst
   PRESENCE optional}
PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   repetitionPeriod
                                                    RepetitionPeriod
                                                                                              OPTIONAL,
   repetitionLength
                                                    RepetitionLength
                                                                                               OPTIONAL,
   tdd-PhysicalChannelOffset
                                                    TDD-PhysicalChannelOffset
                                                                                              OPTIONAL,
   dL-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst
                                             ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
   . . .
PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst
DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlot
                                         TimeSlot,
   midambleShiftAndBurstType
                                         MidambleShiftAndBurstType
                                                                   OPTIONAL,
   tFCI-Presence
                                         TFCI-Presence OPTIONAL,
   dL-Code-InformationModifyList-PSCH-ReconfRqst
                                                            DL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
   iE-Extensions
                                         ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEOUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst
DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID
                                            PDSCH-ID,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                      OPTIONAL,
DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                                RepetitionPeriod
                                                                                                        OPTIONAL,
    repetitionLength
                                                                RepetitionLength
                                                                                                        OPTIONAL,
                                                                TDD-PhysicalChannelOffset
    tdd-PhysicalChannelOffset
                                                                                                        OPTIONAL,
    dL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                                                                          OPTIONAL.
                                                ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModifyItem-PSCH-
ReconfRqst
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR
                                                            TimeSlotLCR,
    midambleShiftLCR
                                                            MidambleShiftLCR
                                                                                OPTIONAL,
    tFCI-Presence
                                                            TFCI-Presence OPTIONAL,
    dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
                                                            DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst
DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID
                                            PDSCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    iE-Extensions
                                            ProtocolExtensionContainer { | DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
```

```
DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCHSets-DeleteList-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRgst
                                       ::= SEOUENCE {
PDSCHSets-DeleteItem-PSCH-ReconfRqst
   pDSCHSet-ID
                                              PDSCHSet-ID,
                                              iE-Extensions
PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-AddList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRgst
PUSCHSets-AddItem-PSCH-ReconfRqst
                                 ::= SEQUENCE {
   pUSCHSet-ID
                                              PUSCHSet-ID,
   pUSCH-InformationList
                                              PUSCH-Information-AddList-PSCH-ReconfRgst OPTIONAL,
   -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
   iE-Extensions
                                              ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                       OPTIONAL.
    . . .
PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject
                                                                         EXTENSION PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
   PRESENCE
               optional}, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    . . .
PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }}
PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject
                                                                            TYPE
                                                                                    PUSCH-Information-AddItem-PSCH-ReconfRqst
                                                                                                                                  PRESENCE
   mandatory}
PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
   uL-Timeslot-InformationAddList-PSCH-ReconfRgst
                                                             UL-Timeslot-InformationAddList-PSCH-ReconfRgst,
   iE-Extensions
                                              ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                OPTIONAL,
    . . .
PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
UL-Timeslot-InformationAddList-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRgst
UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
                                            TimeSlot.
                                            MidambleShiftAndBurstType,
    midambleShiftAndBurstType
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-InformationAddList-PSCH-ReconfRgst
                                                            UL-Code-InformationAddList-PSCH-ReconfRgst,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                         OPTIONAL,
UL-Timeslot-InformationAddItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst
UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID
                                            PUSCH-ID.
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                   OPTIONAL,
UL-Code-InformationAddItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst
                                                                    UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions
                                                ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfULTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-InformationAddList-LCR-PSCH-ReconfRqst
                                                                UL-Code-InformationAddList-LCR-PSCH-ReconfRgst,
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
```

```
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-LCR-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRgst
UL-Code-InformationAddItem-LCR-PSCH-ReconfRgst ::= SEOUENCE {
   pUSCH-ID
    tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                    OPTIONAL,
    . . .
UL-Code-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst
PUSCHSets-ModifyItem-PSCH-ReconfRqst
                                       ::= SEQUENCE {
   pUSCHSet-ID
                                              PUSCHSet-ID,
   pUSCH-InformationList
                                              PUSCH-Information-ModifyList-PSCH-ReconfRqst,
   iE-Extensions
                                              ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRgst-ExtIEs} }
PUSCHSets-ModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}
PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    TYPE PUSCH-Information-ModifyItem-PSCH-ReconfRgst
                                                                                                                                       PRESENCE
    optional}|
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst
                                                          CRITICALITY reject
                                                                                 TYPE PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst
       PRESENCE
                   optional}
PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod
                                                                             OPTIONAL.
   repetitionLength
                                          RepetitionLength
                                                                             OPTIONAL,
    tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset
                                                                             OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRgst
                                                                  UL-Timeslot-InformationModifyList-PSCH-ReconfRgst
   iE-Extensions
                                              ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                    OPTIONAL,
       . . .
PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst
```

```
UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot
                                            TimeSlot.
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                        OPTIONAL.
    t.FCI-Presence
                                            TFCI-Presence OPTIONAL.
    uL-Code-InformationModifyList-PSCH-ReconfRqst
                                                                UL-Code-InformationModifyList-PSCH-ReconfRgst OPTIONAL,
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEOUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst
UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID
                                            PUSCH-ID,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                      OPTIONAL,
    . . .
UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod
                                                                    OPTIONAL,
    repetitionLength
                                            RepetitionLength
                                                                    OPTIONAL,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst
                                                                        UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst
                                                ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
        . . .
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModifyItem-PSCH-
ReconfRqst
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                                OPTIONAL.
    uL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                    UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
```

```
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst
UL-Code-LCR-InformationModifyItem-PSCH-ReconfRgst ::= SEOUENCE {
    pUSCH-ID
                                            PUSCH-ID,
    tdd-ChannelisationCodeLCR
                                                TDD-ChannelisationCodeLCR,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst
PUSCHSets-DeleteItem-PSCH-ReconfRqst
                                         ::= SEQUENCE {
   pUSCHSet-ID
                                                PUSCHSet-ID,
   iE-Extensions
                                                ProtocolExtensionContainer { {PUSCHSets-DeleteItem-PSCH-ReconfRgst-ExtIEs} } OPTIONAL.
PUSCHSets-DeleteItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-PDSCH-TDD-Information-PSCH-ReconfRqst ::= SEQUENCE {
    dL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst
                                                                        DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst
   dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                        DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst OPTIONAL,
   iE-Extensions
                                                ProtocolExtensionContainer { { HS-PDSCH-TDD-Information-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                      OPTIONAL,
HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRgst::= SEOUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstTvpe
                                            MidambleShiftAndBurstType,
    dl-HS-PDSCH-Codelist-PSCH-ReconfRqst
                                            DL-HS-PDSCH-Codelist-PSCH-ReconfRast,
    maxHSDSCH-HSSCCH-Power
                                            MaximumTransmissionPower
                                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
```

```
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-HS-PDSCH-Codelist-PSCH-ReconfRqst ::= SEOUENCE (SIZE (1..maxNrOfHSPDSCHs)) OF TDD-ChannelisationCode
DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-
ReconfRast
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst::= SEOUENCE {
   timeSlot
                                          TimeSlotLCR,
   midambleShiftAndBurstType
                                          MidambleShiftLCR,
   dl-HS-PDSCH-Codelist-LCR-PSCH-ReconfRgst
                                             DL-HS-PDSCH-Codelist-LCR-PSCH-ReconfRqst,
   maxHSDSCH-HSSCCH-Power
                                              MaximumTransmissionPower
                                                                        OPTIONAL.
                                          ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-HS-PDSCH-Codelist-LCR-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfHSPDSCHs)) OF TDD-ChannelisationCode
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRgst::= SEQUENCE {
   hS-SCCH-Information-PSCH-ReconfRqst
                                          HS-SCCH-Information-PSCH-ReconfRqst
                                                                                 OPTIONAL,
   hS-SCCH-Information-LCR-PSCH-ReconfRqst HS-SCCH-Information-LCR-PSCH-ReconfRqst
                                                                                    OPTIONAL,
                                          iE-Extensions
                                                                                                                                OPTIONAL,
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-Information-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-PSCH-ReconfRqst
HS-SCCH-InformationItem-PSCH-ReconfRgst ::= SEQUENCE
   hS-SCCH-ID
                                          HS-SCCH-ID,
   timeSlot
                                          TimeSlot,
   midambleShiftAndBurstType
                                          MidambleShiftAndBurstType,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   hS-SCCH-MaxPower
                                          DL-Power,
   hS-SICH-Information
                                          HS-SICH-Information-PSCH-ReconfRgst,
   iE-Extensions
                                          ProtocolExtensionContainer { { HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Information-PSCH-ReconfRqst ::= SEOUENCE {
```

```
hsSICH-ID
                                          HS-SICH-ID,
   timeSlot
                                          TimeSlot,
   midambleShiftAndBurstType
                                          MidambleShiftAndBurstType.
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   iE-Extensions
                                          ProtocolExtensionContainer { { HS-SICH-Information-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                        OPTIONAL.
HS-SICH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-Information-LCR-PSCH-ReconfRgst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRgst
HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   hs-sccH-ID
                                          HS-SCCH-ID,
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   first-TDD-ChannelisationCode
                                          TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                          TDD-ChannelisationCode,
   hS-SCCH-MaxPower
                                          DL-Power,
   hS-SICH-Information-LCR
                                          HS-SICH-Information-LCR-PSCH-ReconfRqst,
                                          ProtocolExtensionContainer { { HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
    . . .
HS-SCCH-InformationItem-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE
   hsSICH-ID
                                          HS-SICH-ID,
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   tdd-ChannelisationCode
                                      TDD-ChannelisationCode,
   iE-Extensions
                                          HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE {
   hS-SCCH-InformationModify-PSCH-ReconfRgst
                                                  HS-SCCH-InformationModify-PSCH-ReconfRgst OPTIONAL.
   hS-SCCH-InformationModify-LCR-PSCH-ReconfRqst
                                                 HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
HS-SCCH-InformationModify-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-PSCH-ReconfRqst
                                                ::= SEQUENCE {
   hs-sccH-ID
                                           HS-SCCH-ID.
    timeSlot
                                           TimeSlot
                                                       OPTIONAL,
                                           MidambleShiftAndBurstType OPTIONAL,
    midambleShiftAndBurstType
    tdd-ChannelisationCode
                                           TDD-ChannelisationCode OPTIONAL,
    hS-SCCH-MaxPower
                                           DL-Power
                                                      OPTIONAL,
                                           HS-SICH-InformationModify-PSCH-ReconfRqst OPTIONAL,
   hS-SICH-Information
                                           ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
HS-SCCH-InformationModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-InformationModify-PSCH-ReconfRgst
                                            ::= SEOUENCE
    hsSICH-ID
                                           HS-SICH-ID,
    timeSlot
                                           TimeSlot
                                                       OPTIONAL,
    midambleShiftAndBurstType
                                           MidambleShiftAndBurstType OPTIONAL,
    tdd-ChannelisationCode
                                           TDD-ChannelisationCode OPTIONAL,
                                           ProtocolExtensionContainer { { HS-SICH-InformationModify-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
HS-SICH-InformationModify-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   hs-sccH-ID
                                           HS-SCCH-ID,
    timeSlotLCR
                                           TimeSlotLCR
                                                           OPTIONAL,
    midambleShiftLCR
                                           MidambleShiftLCR
                                                               OPTIONAL,
                                           TDD-ChannelisationCode OPTIONAL,
    first-TDD-ChannelisationCode
    second-TDD-ChannelisationCode
                                           TDD-ChannelisationCode OPTIONAL,
   hS-SCCH-MaxPower
                                           DL-Power
                                                       OPTIONAL,
                                           HS-SICH-InformationModify-LCR-PSCH-ReconfRqst OPTIONAL,
   hS-SICH-Information-LCR
                                           ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   hsSICH-ID
                                           HS-SICH-ID,
    timeSlotLCR
                                           TimeSlotLCR
                                                           OPTIONAL,
    midambleShiftLCR
                                           MidambleShiftLCR
                                                               OPTIONAL,
```

```
tdd-ChannelisationCode
                                   TDD-ChannelisationCode OPTIONAL,
   iE-Extensions
                                       ProtocolExtensionContainer { { HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs} }
HS-SICH-InformationModify-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst
                                                  ::= SEOUENCE {
   hs-sccH-ID
   iE-Extensions
                                          ProtocolExtensionContainer { { Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    ****************
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE
__ **********************
PhysicalSharedChannelReconfigurationResponse ::= SEOUENCE {
                     ProtocolIE-Container {{PhysicalSharedChannelReconfigurationResponse-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponse-Extensions}}
                                                                                                                   OPTIONAL,
PhysicalSharedChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-CriticalityDiagnostics
                                      CRITICALITY
                                                                TYPE
                                                                           CriticalityDiagnostics PRESENCE optional },
                                                     ignore
   . . .
PhysicalSharedChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE
  *****************
PhysicalSharedChannelReconfigurationFailure ::= SEQUENCE {
                     ProtocolIE-Container {{PhysicalSharedChannelReconfigurationFailure-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailure-Extensions}}
                                                                                                                  OPTIONAL,
```

```
PhysicalSharedChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
           id-CauseLevel-PSCH-ReconfFailure
                                                   CRITICALITY ignore TYPE CauseLevel-PSCH-ReconfFailure PRESENCE mandatory }
    { ID
           id-CriticalityDiagnostics
                                            CRITICALITY ignore
                                                                            CriticalityDiagnostics PRESENCE optional },
    . . .
PhysicalSharedChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-PSCH-ReconfFailure ::= CHOICE {
    generalCause
                           GeneralCauseList-PSCH-ReconfFailure,
                           SetSpecificCauseList-PSCH-ReconfFailureTDD,
    setSpecificCause
GeneralCauseList-PSCH-ReconfFailure ::= SEQUENCE {
    iE-Extensions
                                ProtocolExtensionContainer { { GeneralCauseItem-PSCH-ReconfFailure-ExtIEs} }
                                                                                                                 OPTIONAL,
GeneralCauseItem-PSCH-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SetSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD
                                                                                                        OPTIONAL,
    unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD
                                                                                                        OPTIONAL,
                                                    ProtocolExtensionContainer { { SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPDSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PDSCHSetItemIE-PSCH-ReconfFailureTDD }}
Unsuccessful-PDSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID
           id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory }
Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
   pDSCHSet-ID
                            PDSCHSet-ID,
    cause
                            Cause,
                            ProtocolExtensionContainer { {Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }
    iE-Extensions
```

```
Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPUSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PUSCHSetItemIE-PSCH-ReconfFailureTDD }}
Unsuccessful-PUSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
          id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory }
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
   pUSCHSet-ID
                         PUSCHSet-ID,
   cause
                          Cause,
                          ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }
   iE-Extensions
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- RESET REQUEST
__ ********************************
ResetRequest ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                {{ResetRequest-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{ResetRequest-Extensions}}
                                                                                  OPTIONAL,
ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
   {ID id-ResetIndicator
                             CRITICALITY ignore
                                                            ResetIndicator
                                                                               PRESENCE
                                                                                          mandatory},
ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
ResetIndicator ::= CHOICE {
   communicationContext
                                 CommunicationContextList-Reset,
   communicationControlPort
                                 CommunicationControlPortList-Reset,
   nodeB
                                 NULL,
   . . .
CommunicationContextList-Reset ::= SEQUENCE
   communicationContextInfoList-Reset
                                         CommunicationContextInfoList-Reset,
```

```
iE-Extensions
                                                                                                      OPTIONAL,
CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationContextInfoItemIE-Reset }}
CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
   {ID id-CommunicationContextInfoItem-Reset
                                            CRITICALITY reject
                                                                 TYPE CommunicationContextInfoItem-Reset
                                                                                                      PRESENCE mandatory }
CommunicationContextInfoItem-Reset ::= SEOUENCE {
                                     CommunicationContextType-Reset,
   communicationContextType-Reset
                                     ProtocolExtensionContainer { { CommunicationContextInfoItem-Reset-ExtIEs} }
   iE-Extensions
                                                                                                           OPTIONAL,
   . . .
CommunicationContextInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationContextType-Reset ::= CHOICE {
   cRNC-CommunicationContextID
                                     CRNC-CommunicationContextID,
   nodeB-CommunicationContextID
                                     NodeB-CommunicationContextID
CommunicationControlPortList-Reset ::= SEQUENCE {
   communicationControlPortInfoList-Reset
                                         CommunicationControlPortInfoList-Reset,
                                         iE-Extensions
                                                                                                             OPTIONAL,
   . . .
CommunicationControlPortItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationControlPortInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCCPinNodeB)) OF ProtocolIE-Single-Container
{{CommunicationControlPortInfoItemIE-Reset }}
CommunicationControlPortInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
   {ID id-CommunicationControlPortInfoItem-Reset
                                                CRITICALITY reject
                                                                    TYPE CommunicationControlPortInfoItem-Reset
                                                                                                             PRESENCE mandatory}
CommunicationControlPortInfoItem-Reset ::= SEQUENCE {
   communicationControlPortID
                                  CommunicationControlPortID,
                                  ProtocolExtensionContainer { {CommunicationControlPortInfoItem-Reset-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
```

```
CommunicationControlPortInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ******************
-- RESET RESPONSE
     ResetResponse ::= SEQUENCE {
                                            {{ResetResponse-IEs}},
   protocolIEs
                       ProtocolIE-Container
   protocolExtensions
                       ProtocolExtensionContainer {{ResetResponse-Extensions}}
                                                                                  OPTIONAL,
ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
   {ID id-CriticalityDiagnostics
                                  CRITICALITY
                                                                 CriticalityDiagnostics
                                                                                         PRESENCE optional },
                                                ignore
                                                          TYPE
   . . .
ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    -- INFORMATION EXCHANGE INITIATION REQUEST
       InformationExchangeInitiationRequest ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{InformationExchangeInitiationRequest-IEs}},
                       ProtocolExtensionContainer {{InformationExchangeInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                OPTIONAL,
InformationExchangeInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
         id-InformationExchangeID
                                                                                  TYPE InformationExchangeID
   { ID
                                                          CRITICALITY reject
   PRESENCE
             mandatory }|
   { ID id-InformationExchangeObjectType-InfEx-Rqst
                                                                               TYPE InformationExchangeObjectType-InfEx-Rqst
                                                      CRITICALITY reject
   PRESENCE
             mandatory }|
         id-InformationType
                                            CRITICALITY reject
                                                                                  InformationType
                                                                                                           PRESENCE mandatory
         id-InformationReportCharacteristics
                                                                                  TYPE InformationReportCharacteristics
                                                          CRITICALITY reject
   { ID
             mandatory},
   PRESENCE
InformationExchangeInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
   cell
                              Cell-InfEx-Rqst,
```

```
Cell-InfEx-Rqst ::= SEQUENCE {
                                ProtocolExtensionContainer { { CellItem-InfEx-Rgst-ExtIEs} }
   iE-Extensions
                                                                                          OPTIONAL,
Cellitem-InfEx-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   -- INFORMATION EXCHANGE INITIATION RESPONSE
__ **********************
InformationExchangeInitiationResponse ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                               {{InformationExchangeInitiationResponse-IEs}},
                        ProtocolExtensionContainer {{InformationExchangeInitiationResponse-Extensions}}
   protocolExtensions
                                                                                                     OPTIONAL,
InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
          id-InformationExchangeID
                                                         CRITICALITY ignore
                                                                                  TYPE InformationExchangeID
                                                                                                                             PRESENCE
   mandatory }|
   { ID
          id-InformationExchangeObjectType-InfEx-Rsp
                                                                                      InformationExchangeObjectType-InfEx-Rsp
                                                      CRITICALITY ignore
                                                                                                                             PRESENCE
   optional
         id-CriticalityDiagnostics
   { ID
                                                  CRITICALITY ignore
                                                                           TYPE
                                                                                  CriticalityDiagnostics
                                                                                                                  PRESENCE optional },
InformationExchangeInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
                            Cell-InfEx-Rsp,
   cell
   . . .
Cell-InfEx-Rsp ::= SEQUENCE {
   requestedDataValue
                                RequestedDataValue,
   iE-Extensions
                                ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs} }
                                                                                          OPTIONAL,
CellItem-InfEx-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ **********************
```

```
-- INFORMATION EXCHANGE INITIATION FAILURE
  InformationExchangeInitiationFailure ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                  {{InformationExchangeInitiationFailure-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}}
                                                                                                            OPTIONAL,
InformationExchangeInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
           id-InformationExchangeID
                                                                                        InformationExchangeID
                                                                                                                       PRESENCE mandatory } |
                                                                                TYPE
     ID
           id-Cause
                                          CRITICALITY
                                                                         TYPE
                                                                                Cause
                                                                                                      PRESENCE mandatory
                                                         ignore
     ID
           id-CriticalityDiagnostics
                                                                         TYPE
                                                                                CriticalityDiagnostics PRESENCE optional },
                                          CRITICALITY
                                                          ignore
InformationExchangeInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- INFORMATION REPORT
InformationReport ::= SEQUENCE {
                                                {{InformationReport-IEs}},
   protocolIEs
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer {{InformationReport-Extensions}}
                                                                                            OPTIONAL,
InformationReport-IEs NBAP-PROTOCOL-IES ::= {
    { ID
          id-InformationExchangeID
                                                             CRITICALITY ignore
                                                                                        TYPE InformationExchangeID
                                                                                                                                      PRESENCE
   mandatory } |
           id-InformationExchangeObjectType-InfEx-Rprt
                                                         CRITICALITY ignore
                                                                                            InformationExchangeObjectType-InfEx-Rprt
                                                                                                                                     PRESENCE
   mandatory },
    . . .
InformationReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
   cell
                                  Cell-Inf-Rprt,
    . . .
Cell-Inf-Rprt ::= SEQUENCE {
   requestedDataValueInformation
                                  RequestedDataValueInformation,
   iE-Extensions
                                  ProtocolExtensionContainer {{ CellItem-Inf-Rprt-ExtIEs }}
                                                                                              OPTIONAL,
```

```
. . .
CellItem-Inf-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- INFORMATION EXCHANGE TERMINATION REQUEST
__ *********************
InformationExchangeTerminationRequest ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{InformationExchangeTerminationReguest-IEs}},
                        ProtocolExtensionContainer {{InformationExchangeTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                     OPTIONAL,
InformationExchangeTerminationRequest-IES NBAP-PROTOCOL-IES ::= {
          id-InformationExchangeID
                                                                                  InformationExchangeID
                                                                                                             PRESENCE mandatory },
   . . .
InformationExchangeTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
       -- INFORMATION EXCHANGE FAILURE INDICATION
  ****************
InformationExchangeFailureIndication ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                              {{InformationExchangeFailureIndication-IEs}},
                            ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
InformationExchangeFailureIndication-IES NBAP-PROTOCOL-IES ::= {
          id-InformationExchangeID
                                                                    TYPE
                                                                                                     PRESENCE mandatory } |
                                          CRITICALITY ignore
                                                                           InformationExchangeID
    ID
          id-Cause
                                   CRITICALITY ignore
                                                             TYPE
                                                                   Cause
                                                                                       PRESENCE mandatory },
   . . .
InformationExchangeFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- CELL SYNCHRONISATION INITIATION REQUEST TDD
```

```
*****************
CellSynchronisationInitiationRequestTDD ::= SEQUENCE
   protocolIEs
                          ProtocolIE-Container
                                                  {{CellSynchronisationInitiationRequestTDD-IEs}},
                          ProtocolExtensionContainer {{CellSynchronisationInitiationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
CellSynchronisationInitiationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD
                                                                                                         SYNCDlCodeId-TransInitLCR-
                                                                     CRITICALITY
                                                                                    reject
                                                                                              EXTENSION
CellSyncInitiationRqstTDD
                              PRESENCE
                                          optional
                                                     } -- Applicable to 1.28Mcps TDD only
          id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD
                                                                         CRITICALITY
                                                                                        reject
                                                                                                              SYNCDlCodeId-MeasureInitLCR-
                                                                                                   EXTENSION
CellSyncInitiationRqstTDD
                              PRESENCE
                                          optional
                                                    }, -- Applicable to 1.28Mcps TDD only
CellSynchronisationInitiationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
           id-C-ID
                                          CRITICALITY
                                                         reject
                                                                                                      PRESENCE mandatory
           id-cellSyncBurstRepetitionPeriod
     ID
                                                     CRITICALITY
                                                                     reject
                                                                                TYPE
                                                                                        CellSyncBurstRepetitionPeriod PRESENCE mandatory
     TD
           reject
                                                                                 TYPE
                                                                                        TimeslotInfo-CellSyncInitiationRqstTDD
    optional } | -- Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.
          id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD
                                                                                            TYPE CellSyncBurstTransInit-
                                                                 CRITICALITY
                                                                                reject
                                          optional
CellSyncInitiationRgstTDD
                              PRESENCE
                                                     } -- Applicable to 3.84Mcps TDD only
          id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD
                                                                     CRITICALITY
                                                                                    reject
                                                                                             TYPE CellSyncBurstMeasureInit-
CellSyncInitiationRqstTDD
                              PRESENCE
                                          optional
                                                     }, -- Applicable to 3.84Mcps TDD only
CellSyncBurstTransInit-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBTransmissionID
                                          CSBTransmissionID,
    sfn
                                          SFN,
    cellSyncBurstCode
                                          CellSyncBurstCode,
                                          CellSyncBurstCodeShift,
    cellSyncBurstCodeShift
    initialDLTransPower
                                          DL-Power,
   iE-Extensions
                                          ProtocolExtensionContainer { { CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs} }
CellSyncBurstTransInit-CellSyncInitiationRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeslotInfo-CellSyncInitiationRqstTDD::= SEQUENCE (SIZE (1..15)) OF TimeSlot
CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBMeasurementID
                                          CSBMeasurementID,
    cellSyncBurstCode
                                          CellSyncBurstCode,
    cellSyncBurstCodeShift
                                          CellSyncBurstCodeShift,
                                          SynchronisationReportType,
    synchronisationReportType
                                                                     OPTIONAL,
    synchronisationReportCharacteristics
                                          SynchronisationReportCharacteristics,
    iE-Extensions
                                          ProtocolExtensionContainer { { CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs} }
   OPTIONAL,
```

```
CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBTransmissionID
                                            CSBTransmissionID,
    sfn
                                            SFN,
    uARFCN
                                            UARFCN,
    sYNCDlCodeId
                                            SYNCDlCodeId,
    dwPCH-Power
                                            DwPCH-Power,
    iE-Extensions
                                            ProtocolExtensionContainer { { SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs } }
    OPTIONAL,
SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBMeasurementID
                                            CSBMeasurementID,
    sfn
                                            SFN
                                                            OPTIONAL,
    uARFCN
                                            UARFCN,
    sYNCDlCodeId
                                            SYNCDlCodeId,
    synchronisationReportType
                                            SynchronisationReportType,
                                            SynchronisationReportCharacteristics,
    synchronisationReportCharacteristics
                                            ProtocolExtensionContainer { { SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs } }
    iE-Extensions
    OPTIONAL,
SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- CELL SYNCHRONISATION INITIATION RESPONSE TDD
CellSynchronisationInitiationResponseTDD ::= SEQUENCE
   protocolIEs
                           ProtocolIE-Container
                                                   {{CellSynchronisationInitiationResponseTDD-IEs}},
                           ProtocolExtensionContainer {{CellSynchronisationInitiationResponseTDD-Extensions}}
   protocolExtensions
                                                                                                                     OPTIONAL,
CellSynchronisationInitiationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CellSynchronisationInitiationResponseTDD-IES NBAP-PROTOCOL-IES ::= {
         id-CriticalityDiagnostics
                                                   CRITICALITY
                                                                              TYPE
                                                                                     CriticalityDiagnostics
                                                                                                                              PRESENCE
                                                                  ignore
   optional
  CELL SYNCHRONISATION INITIATION FAILURE TDD
  CellSynchronisationInitiationFailureTDD ::= SEQUENCE
   protocolIEs
                         ProtocolIE-Container
                                                {{CellSynchronisationInitiationFailureTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CellSynchronisationInitiationFailureTDD-Extensions}}
                                                                                                          OPTIONAL,
CellSynchronisationInitiationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationInitiationFailureTDD-IES NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                            CRITICALITY
                                                           ignore
                                                                      TYPE
                                                                                                     PRESENCE mandatory } |
     ID
          id-CriticalityDiagnostics
                                            CRITICALITY
                                                           ignore
                                                                      TYPE
                                                                             CriticalityDiagnostics
                                                                                                     PRESENCE optional },
    *****************
  CELL SYNCHRONISATION RECONFIGURATION REQUEST TDD
  *****************
CellSynchronisationReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{CellSynchronisationReconfigurationRequestTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CellSynchronisationReconfigurationRequestTDD-Extensions}}
                                                                                                               OPTIONAL,
CellSynchronisationReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD
                                                                  CRITICALITY reject EXTENSION NSubCyclesPerCyclePeriod
              PRESENCE optional }
                                    -- Applicable to 1.28Mcps TDD only
    { ID id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD
                                                                      CRITICALITY reject EXTENSION SYNCDlCodeIdTransReconfInfoLCR-
                             PRESENCE optional }
                                                  -- Applicable to 1.28Mcps TDD only
CellSvncReconfRastTDD
    { ID id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD
                                                                      CRITICALITY reject EXTENSION SYNCDlCodeIdMeasInfoLCR-
CellSyncReconfRastTDD
                         PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
CellSynchronisationReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                                        CRITICALITY
                                                       reject
                                                                  TYPE
                                                                          C-ID
                                                                                                   PRESENCE
                                                                                                              mandatory
   { ID
         id-TimeSlot
                                        CRITICALITY
                                                                  TYPE
                                                                         TimeSlot
                                                                                                  PRESENCE
                                                       reject
                                                                                                              mandatory
   -- Applicable to 3.84Mcps TDD only. For 1.28Mcps TDD, the CRNC should set this to 0 and the Node B shall ignore it.
```

```
id-NCyclesPerSFNperiod
                                          CRITICALITY
                                                                      TYPE
                                                                             NCyclesPerSFNperiod
                                                                                                        PRESENCE
                                                          reject
                                                                                                                   mandatory
     ID
           id-NRepetitionsPerCyclePeriod
                                          CRITICALITY
                                                          reject
                                                                      TYPE
                                                                             NRepetitionsPerCyclePeriod PRESENCE
                                                                                                                   mandatory
     ID
           id-CellSyncBurstTransReconfInfo-CellSyncReconfRgstTDD
                                                                      CRITICALITY
                                                                                     reject
                                                                                              TYPE CellSyncBurstTransReconfInfo-
CellSyncReconfRqstTDD
                           PRESENCE
                                      optional
                                                 } -- Applicable to 3.84Mcps TDD only
           id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD
                                                                          CRITICALITY
                                                                                         reject
                                                                                                     TYPE CellSyncBurstMeasInfo-
CellSyncReconfRqstTDD
                           PRESENCE
                                      optional
                                                  }, -- Applicable to 3.84Mcps TDD only
CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstTransInfoItem-
CellSyncReconfRqstTDD
CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBTransmissionID
                                              CSBTransmissionID,
    syncFrameNumberToTransmit
                                              SyncFrameNumber,
    cellSyncBurstCode
                                              CellSyncBurstCode
                                                                          OPTIONAL,
                                              CellSyncBurstCodeShift
    cellSyncBurstCodeShift
                                                                          OPTIONAL,
   dlTransPower
                                              DL-Power
                                                                          OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { { CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
CellSyncBurstTransInfoItem-CellSyncReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasInfo-CellSyncReconfRgstTDD ::= SEQUENCE {
    cellSyncBurstMeasInfoList-CellSyncReconfRqstTDD
                                                      CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
    synchronisationReportType
                                                      SynchronisationReportTypeIE
                                                                                             OPTIONAL,
    synchronisationReportCharacteristics
                                                      SynchronisationReportCharacteristicsIE OPTIONAL,
    iE-Extensions
                                                      ProtocolExtensionContainer { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container {{ CellSyncBurstMeasInfoListIEs-CellSyncReconfRqstTDD }}
CellSyncBurstMeasInfoListIEs-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
     TYPE CellSvncBurstMeasInfoListIE-CellSvncReconfRqstTDD
    PRESENCE mandatory }
SynchronisationReportTypeIE ::= ProtocolIE-Single-Container {{ SynchronisationReportTypeIEs }}
SynchronisationReportTypeIEs NBAP-PROTOCOL-IES ::= {
     ID id-SynchronisationReportType
                                                      CRITICALITY reject TYPE SynchronisationReportType
                                                                                                                         PRESENCE mandatory }
```

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```
SynchronisationReportCharacteristicsIE ::= ProtocolIE-Single-Container {{ SynchronisationReportCharacteristicsIEs }}
SynchronisationReportCharacteristicsIEs NBAP-PROTOCOL-IES ::= {
    { ID id-SynchronisationReportCharacteristics
                                                     CRITICALITY reject TYPE SynchronisationReportCharacteristics
                                                                                                                       PRESENCE mandatory }
CellSyncBurstMeasInfoListIE-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-
CellSyncReconfRqstTDD
CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    syncFrameNrToReceive
                                          SyncFrameNumber,
    syncBurstInfo
                                          CellSyncBurstInfoList-CellSyncReconfRgstTDD,
   iE-Extensions
                                          ProtocolExtensionContainer { CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
                                                                                                                                   OPTIONAL.
CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfoItem-CellSyncReconfRqstTDD
CellSyncBurstInfoItem-CellSyncReconfRgstTDD ::= SEOUENCE {
    cSBMeasurementID
                                              CSBMeasurementID,
    cellSyncBurstCode
                                              CellSyncBurstCode,
   cellSyncBurstCodeShift
                                              CellSyncBurstCodeShift,
   iE-Extensions
                                              ProtocolExtensionContainer { { CellSyncBurstInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
                                                                                                                                   OPTIONAL,
CellSyncBurstInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSyncFramesLCR)) OF SYNCDlCodeIdTransReconfItemLCR-
CellSyncReconfRqstTDD
SYNCDlCodeIdTransReconfItemLCR-CellSyncReconfRgstTDD ::= SEQUENCE {
    cSBTransmissionID
                                              CSBTransmissionID,
    syncFrameNumberforTransmit
                                              SyncFrameNumber,
    uARFCN
                                              UARFCN,
    sYNCDlCodeId
                                              SYNCDlCodeId
                                                             OPTIONAL,
   dwPCH-Power
                                              DwPCH-Power
                                                             OPTIONAL,
                                              iE-Extensions
   OPTIONAL,
    . . .
SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
SYNCDlCodeIdMeasInfoLCR-CellSyncReconfRqstTDD::= SEQUENCE {
   sYNCDlCodeIdMeasInfoList
                                            SYNCDlCodeIdMeasInfoList-CellSyncReconfRgstTDD,
   synchronisationReportType
                                            SynchronisationReportType
                                                                                         OPTIONAL.
   synchronisationReportCharacteristics
                                            SynchronisationReportCharacteristics
                                                                                      OPTIONAL,
                      iE-Extensions
SYNCDlCodeIdMeasInfoLCR-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdMeasInfoList-CellSyncReconfRgstTDD::= SEOUENCE (SIZE (1.. maxNrOfSyncDLCodesLCR)) OF SYNCDlCodeIdMeasInfoItem-CellSyncReconfRgstTDD
SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
   syncFrameNrToReceive
                                         SyncFrameNumber,
   sYNCDlCodeIdInfoLCR
                                         SYNCDlCodeIdInfoListLCR-CellSyncReconfRgstTDD,
                                         ProtocolExtensionContainer { { SYNCDlCodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                               OPTIONAL,
SYNCDlCodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdInfoListLCR-CellSyncReconfRgstTDD ::= SEQUENCE (SIZE (1.. maxNrOfReceptionsperSyncFrameLCR)) OF SYNCDlCodeIdInfoItemLCR-
CellSyncReconfRqstTDD
SYNCDlCodeIdInfoItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
   cSBMeasurementID
                                            CSBMeasurementID,
   sYNCDlCodeId
                                            SYNCDlCodeId,
   uARFCN
                                            UARFCN,
   propagationDelayCompensation
                                            TimingAdjustmentValueLCR
                                                                          OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { { SYNCDlCodeIdInfoItemLCR-CellSyncReconfRqstTDD-ExtIEs} }
   OPTIONAL,
SYNCDlCodeIdInfoItemLCR-CellSyncReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- CELL SYNCHRONISATION RECONFIGURATION RESPONSE TDD
  ******************
CellSynchronisationReconfigurationResponseTDD ::= SEQUENCE {
                                               {{CellSynchronisationReconfigurationResponseTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer {{CellSynchronisationReconfigurationResponseTDD-Extensions}}
                                                                                                                 OPTIONAL,
```

```
CellSynchronisationReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::=
          id-CriticalityDiagnostics
                                                  CRITICALITY
                                                                ignore
                                                                           TYPE
                                                                                   CriticalityDiagnostics
                                                                                                             PRESENCE optional },
   . . .
  CELL SYNCHRONISATION RECONFIGURATION FAILURE TDD
  CellSynchronisationReconfigurationFailureTDD ::= SEQUENCE
                                                  {{CellSynchronisationReconfigurationFailureTDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                         ProtocolExtensionContainer {{CellSynchronisationReconfigurationFailureTDD-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL,
CellSynchronisationReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                           CRITICALITY
                                                          ignore
                                                                    TYPE
                                                                           Cause
                                                                                                  PRESENCE mandatory
    ID
          id-CriticalityDiagnostics
                                           CRITICALITY
                                                         ignore
                                                                    TYPE
                                                                           CriticalityDiagnostics
                                                                                                  PRESENCE optional },
  -- CELL SYNCHRONISATION ADJUSTMENT REQUEST TDD
  *****************
CellSynchronisationAdjustmentRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                  {{CellSynchronisationAdjustmentRequestTDD-IEs}},
                                                 {{CellSynchronisationAdjustmentRequestTDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                       OPTIONAL,
CellSynchronisationAdjustmentRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CellAdjustmentInfo-SyncAdjustmntRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfo-SyncAdjustmentRqstTDD PRESENCE mandatory },
```

```
CellAdjustmentInfo-SyncAdjustmentRqstTDD::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellAdjustmentInfoItemIE-
SyncAdjustmntRgstTDD }}
CellAdjustmentInfoItemIE-SyncAdjustmntRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-CellAdjustmentInfoItem-SyncAdjustmentRgstTDD
                                                                                ignore
                                                                                                        CellAdjustmentInfoItem-SyncAdjustmentRgstTDD
                                                                CRITICALITY
        PRESENCE
                  mandatory }
CellAdjustmentInfoItem-SyncAdjustmentRqstTDD ::= SEQUENCE {
                                            C-ID,
    frameAdjustmentValue
                                            FrameAdjustmentValue
                                                                        OPTIONAL,
    timingAdjustmentValue
                                            TimingAdjustmentValue
                                                                        OPTIONAL,
    dLTransPower
                                            DL-Power
                                                                        OPTIONAL, -- Applicable to 3.84Mcps TDD only
    sfn
                                            SFN
                                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { CellAdjustmentInfoItem-SyncAdjustmntRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                      OPTIONAL,
CellAdjustmentInfoItem-SyncAdjustmntRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                                                                            PRESENCE optional } | -- Applicable to 1.28Mcps TDD only
     ID id-DwPCH-Power
                                        CRITICALITY ignore EXTENSION DwPCH-Power
     ID id-TimingAdjustmentValueLCR
                                       CRITICALITY ignore EXTENSION TimingAdjustmentValueLCR PRESENCE optional }, -- Applicable to 1.28Mcps TDD
only
  CELL SYNCHRONISATION ADJUSTMENT RESPONSE TDD
CellSynchronisationAdjustmentResponseTDD ::= SEQUENCE
    protocolIEs
                            ProtocolIE-Container
                                                    {{CellSynchronisationAdjustmentResponseTDD-IEs}},
                            ProtocolExtensionContainer {{CellSynchronisationAdjustmentResponseTDD-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
CellSynchronisationAdjustmentResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID
           id-CriticalityDiagnostics
                                                                                    CriticalityDiagnostics
                                                CRITICALITY
                                                                            TYPE
                                                                                                                       PRESENCE optional },
                                                                ignore
  CELL SYNCHRONISATION ADJUSTMENT FAILURE TDD
CellSynchronisationAdjustmentFailureTDD ::= SEQUENCE
                                                    {{CellSynchronisationAdjustmentFailureTDD-IEs}},
    protocolIEs
                           ProtocolIE-Container
```

```
ProtocolExtensionContainer {{CellSynchronisationAdjustmentFailureTDD-Extensions}}
                                                                                                                    OPTIONAL,
    protocolExtensions
CellSynchronisationAdjustmentFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentFailureTDD-IES NBAP-PROTOCOL-IES ::= {
           id-CauseLevel-SyncAdjustmntFailureTDD CRITICALITY ignore
                                                                            TYPE
                                                                                     CauseLevel-SyncAdjustmntFailureTDD
                                                                                                                          PRESENCE mandatory } |
    { ID
           id-CriticalityDiagnostics
                                                                            TYPE
                                                                                    CriticalityDiagnostics
                                                                                                                          PRESENCE optional },
                                                    CRITICALITY ignore
    . . .
CauseLevel-SyncAdjustmntFailureTDD ::= CHOICE {
    generalCause
                           GeneralCauseList-SyncAdjustmntFailureTDD,
                            CellSpecificCauseList-SyncAdjustmntFailureTDD,
    cellSpecificCause
GeneralCauseList-SyncAdjustmntFailureTDD::= SEQUENCE {
                                                ProtocolExtensionContainer { GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                      OPTIONAL,
    . . .
GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSpecificCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
    unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD
                                                                        Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD,
    iE-Extensions
                                                ProtocolExtensionContainer { { CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs} }
    OPTIONAL,
    . . .
CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{
Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD }}
Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD NBAP-PROTOCOL-IES ::= {
           id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD
                                                                                     CRITICALITY ignore
                                                                                                              TYPE Unsuccessful-cell-
InformationRespItem-SyncAdjustmntFailureTDD
Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD::= SEQUENCE {
    c-ID
                                                C-ID,
                                                Cause,
    cause
```

```
ProtocolExtensionContainer { { Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-
   iE-Extensions
ExtIEs } }
              OPTIONAL,
   . . .
Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    CELL SYNCHRONISATION TERMINATION REQUEST TDD
  ************************
CellSynchronisationTerminationRequestTDD ::= SEOUENCE {
                                               {{CellSynchronisationTerminationRequestTDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
                         ProtocolExtensionContainer {{CellSynchronisationTerminationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                          OPTIONAL,
   . . .
CellSynchronisationTerminationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationTerminationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-C-ID
                                                                  TYPE
                                                                         C-ID
                                                                                                 PRESENCE mandatory
                                        CRITICALITY
                                                       ignore
     ID
          id-CSBTransmissionID
                                        CRITICALITY
                                                       ignore
                                                                  TYPE
                                                                         CSBTransmissionID
                                                                                                 PRESENCE optional
     ID
          id-CSBMeasurementID
                                        CRITICALITY
                                                       ignore
                                                                  TYPE
                                                                         CSBMeasurementID
                                                                                                 PRESENCE optional
  *****************
-- CELL SYNCHRONISATION FAILURE INDICATION TDD
__ **********************
CellSynchronisationFailureIndicationTDD ::= SEQUENCE
   protocolIEs
                         ProtocolIE-Container
                                               {{CellSynchronisationFailureIndicationTDD-IEs}},
                         ProtocolExtensionContainer {{CellSynchronisationFailureIndicationTDD-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
CellSynchronisationFailureIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationFailureIndicationTDD-IES NBAP-PROTOCOL-IES ::= {
     ID
          id-C-ID
                                        CRITICALITY
                                                       ignore
                                                                  TYPE
                                                                         C-ID
                                                                                                 PRESENCE mandatory
          id-CSBTransmissionID
     ID
                                        CRITICALITY
                                                       ignore
                                                                  TYPE
                                                                         CSBTransmissionID
                                                                                                 PRESENCE optional
     ID
          id-CSBMeasurementID
                                        CRITICALITY
                                                       ignore
                                                                  TYPE
                                                                         CSBMeasurementID
                                                                                                 PRESENCE optional
    { ID
          id-Cause
                                        CRITICALITY
                                                                  TYPE
                                                                                                 PRESENCE mandatory
                                                       ignore
                                                                         Cause
   . . .
```

```
CELL SYNCHRONISATION REPORT TDD
CellSynchronisationReportTDD ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                    {{CellSynchronisationReportTDD-IEs}},
                           ProtocolExtensionContainer {{CellSynchronisationReportTDD-Extensions}}
   protocolExtensions
                                                                                                        OPTIONAL,
    . . .
CellSynchronisationReportTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReportTDD-IES NBAP-PROTOCOL-IES ::= {
           id-CellSyncInfo-CellSyncReprtTDD
    { ID
                                                    CRITICALITY ignore
                                                                            TYPE
                                                                                    CellSyncInfo-CellSyncReprtTDD
                                                                                                                          PRESENCE mandatory },
    . . .
CellSyncInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF CellSyncInfoItemIE-CellSyncReprtTDD
CellSyncInfoItemIE-CellSyncReprtTDD ::= SEQUENCE {
    c-ID-CellSyncReprtTDD
                                        C-ID-IE-CellSyncReprtTDD,
    syncReportType-CellSyncReprtTDD
                                        SyncReportTypeIE-CellSyncReprtTDD
                                                                                OPTIONAL,
C-ID-IE-CellSyncReprtTDD ::= ProtocolIE-Single-Container {{ C-ID-IEs-CellSyncReprtTDD }}
C-ID-IEs-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                                            CRITICALITY ignore TYPE C-ID
                                                                                                                                PRESENCE mandatory }
SyncReportTypeIE-CellSyncReprtTDD::= ProtocolIE-Single-Container {{ SyncReportTypeIEs-CellSyncReprtTDD }}
SyncReportTypeIEs-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
           id-SyncReportType-CellSyncReprtTDD
                                                    CRITICALITY ignore
                                                                            TYPE SyncReportType-CellSyncReprtTDD
                                                                                                                    PRESENCE mandatory
SyncReportType-CellSyncReprtTDD ::= CHOICE {
    intStdPhSyncInfo-CellSyncReprtTDD
                                            IntStdPhCellSyncInfo-CellSyncReprtTDD,
    lateEntrantCell
                               NULL,
    frequencyAcquisition
                               NULL,
    . . .
IntStdPhCellSyncInfo-CellSyncReprtTDD ::= SEQUENCE
    cellSyncBurstMeasuredInfo
                                                CellSyncBurstMeasInfoList-CellSyncReprtTDD,
```

```
ProtocolExtensionContainer { { IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs} }
    iE-Extensions
IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID id-AccumulatedClockupdate-CellSyncReprtTDD
                                                                                        TimingAdjustmentValue PRESENCE optional } |
                                                        CRITICALITY ignore EXTENSION
     ID id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD CRITICALITY ignore EXTENSION
                                                                                         SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD
                                                                                                                                      PRESENCE
optional }, -- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.
CellSyncBurstMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReprtTDD --
Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.
CellSyncBurstMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstInfo-CellSyncReprtTDD
                                            SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
    iE-Extensions
                                            ProtocolExtensionContainer { { CellSyncBurstMeasInfoItem-CellSyncReprtTDD-ExtIEs} }
    . . .
CellSyncBurstMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
                                CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstAvailable
    cellSyncBurstNotAvailable NULL,
    . . .
CellSyncBurstAvailable-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstTiming
                                CellSyncBurstTiming,
    cellSyncBurstSIR
                                CellSyncBurstSIR,
    iE-Extensions
                                ProtocolExtensionContainer { { CellSyncBurstAvailable-CellSyncReprtTDD-ExtIEs} }
                                                                                                                    OPTIONAL,
CellSyncBurstAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0..maxNrOfSyncFramesLCR)) OF SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD
-- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.
SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    syncDLCodeIdInfo-CellSyncReprtTDD
                                            SyncDLCodeIdInfo-CellSyncReprtTDD,
    iE-Extensions
                                            ProtocolExtensionContainer { { SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs } }
                                                                                                                                       OPTIONAL,
    . . .
SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
SyncDLCodeIdInfo-CellSyncReprtTDD ::= SEOUENCE (SIZE (1..maxNrOfReceptionsperSyncFrameLCR)) OF SyncDLCodeIdItem-CellSyncReprtTDD
SyncDLCodeIdItem-CellSyncReprtTDD ::= CHOICE {
                                        SyncDLCodeIdAvailable-CellSyncReprtTDD,
    syncDLCodeIdAvailable
    syncDLCodeIDNotAvailable
                                        NULL,
SyncDLCodeIdAvailable-CellSyncReprtTDD ::= SEQUENCE {
    syncDLCodeIdTiming
                                CellSyncBurstTimingLCR,
    syncDLCodeIdSIR
                                CellSyncBurstSIR,
    iE-Extensions
                                ProtocolExtensionContainer { { SyncDLCodeIdAvailable-CellSyncReprtTDD-ExtIEs } }
                                                                                                                    OPTIONAL.
SyncDLCodeIdAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  BEARER REARRANGEMENT INDICATION
BearerRearrangementIndication ::= SEQUENCE {
                                    ProtocolIE-Container
   protocolIEs
                                                                {BearerRearrangementIndication-IEs}},
                                    ProtocolExtensionContainer {{BearerRearrangementIndication-Extensions}}
   protocolExtensions
                                                                                                                               OPTIONAL,
BearerRearrangementIndication-IES NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                        CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                       PRESENCE mandatory } |
     ID id-SignallingBearerRequestIndicator
                                                        CRITICALITY ignore TYPE SignallingBearerRequestIndicator
                                                                                                                             PRESENCE optional
     ID id-DCH-RearrangeList-Bearer-RearrangeInd
                                                        CRITICALITY ignore TYPE DCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                             PRESENCE optional
     ID id-DSCH-RearrangeList-Bearer-RearrangeInd
                                                        CRITICALITY ignore TYPE DSCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                             PRESENCE optional
     ID id-USCH-RearrangeList-Bearer-RearrangeInd
                                                        CRITICALITY ignore TYPE USCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                             PRESENCE optional
-- TDD only.
                                                                                                                       PRESENCE optional } |
    { ID id-TFCI2BearerRequestIndicator
                                                        CRITICALITY ignore TYPE TFCI2BearerRequestIndicator
    -- FDD only.
    { ID id-HSDSCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                             PRESENCE optional },
                                                        CRITICALITY ignore TYPE HSDSCH-RearrangeList-Bearer-RearrangeInd
BearerRearrangementIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-RearrangeItem-Bearer-RearrangeInd
DCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE
    dCH-ID
                                                    DCH-ID,
```

```
iE-Extensions
DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-RearrangeItem-Bearer-RearrangeInd
DSCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   dsch-ID
                                              DSCH-ID,
   iE-Extensions
                                              ProtocolExtensionContainer { { DSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} } 
                                                                                                                          OPTIONAL,
DSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
USCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-RearrangeItem-Bearer-RearrangeInd
USCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   uSCH-ID
   iE-Extensions
                                              ProtocolExtensionContainer { { USCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }
                                                                                                                          OPTIONAL,
USCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-RearrangeItem-Bearer-RearrangeInd
HSDSCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   hsDSCH-MACdFlow-ID
                                              HSDSCH-MACdFlow-ID,
   iE-Extensions
                                              ProtocolExtensionContainer { { HSDSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }
                                                                                                                         OPTIONAL,
HSDSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- RADIO LINK ACTIVATION COMMAND FDD
  *****************
RadioLinkActivationCommandFDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{RadioLinkActivationCommandFDD-IEs}},
                        ProtocolExtensionContainer {{RadioLinkActivationCommandFDD-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
   . . .
```

```
RadioLinkActivationCommandFDD-IES NBAP-PROTOCOL-IES ::= {
   { ID id-NodeB-CommunicationContextID
                                                      CRITICALITY ignore TYPE
                                                                              NodeB-CommunicationContextID
   PRESENCE mandatory } |
   { ID id-DelayedActivationList-RL-ActivationCmdFDD
                                                                              DelayedActivationInformationList-RL-ActivationCmdFDD
                                                      CRITICALITY ignore TYPE
      PRESENCE mandatory },
RadioLinkActivationCommandFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    DelayedActivationInformation-RL-ActivationCmdFDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdFDD-IEs NBAP-PROTOCOL-IES ::= {
   optional }
DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
   delayed-activation-update DelayedActivationUpdate,
                           ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DelayedActivationInformation-RL-ActivationCmdFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK ACTIVATION COMMAND TDD
  ************************
RadioLinkActivationCommandTDD ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                           {{RadioLinkActivationCommandTDD-IEs}},
                       ProtocolExtensionContainer {{RadioLinkActivationCommandTDD-Extensions}}
   protocolExtensions
                                                                                           OPTIONAL,
RadioLinkActivationCommandTDD-IES NBAP-PROTOCOL-IES ::= {
         id-NodeB-CommunicationContextID
                                                      CRITICALITY ignore TYPE
                                                                              NodeB-CommunicationContextID
             mandatory } |
   PRESENCE
   { ID id-DelayedActivationList-RL-ActivationCmdTDD
                                                      CRITICALITY ignore TYPE
                                                                              DelayedActivationInformationList-RL-ActivationCmdTDD
      PRESENCE mandatory },
RadioLinkActivationCommandTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container
    DelayedActivationInformation-RL-ActivationCmdTDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdTDD-IES NBAP-PROTOCOL-IES ::= {
   optional
DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
   delayed-activation-update DelayedActivationUpdate,
   iE-Extensions
                          ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs} } OPTIONAL,
DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     -- RADIO LINK PARAMETER UPDATE INDICATION FDD
  ****************
RadioLinkParameterUpdateIndicationFDD ::= SEQUENCE
                                           {{RadioLinkParameterUpdateIndicationFDD-IEs}},
   protocolIEs
                       ProtocolIE-Container
                       ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationFDD-Extensions}}
   protocolExtensions
                                                                                              OPTIONAL,
RadioLinkParameterUpdateIndicationFDD-IEs NBAP-PROTOCOL-IES ::= {
    ID id-CRNC-CommunicationContextID
                                        CRITICALITY
                                                               TYPE
                                                                      CRNC-CommunicationContextID
                                                                                                   PRESENCE mandatory
                                                     ignore
    ID id-HSDSCH-FDD-Update-Information
                                        CRITICALITY
                                                     ignore
                                                               TYPE
                                                                      HSDSCH-FDD-Update-Information
                                                                                                     PRESENCE optional },
   . . .
RadioLinkParameterUpdateIndicationFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK PARAMETER UPDATE INDICATION TDD
  RadioLinkParameterUpdateIndicationTDD ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                           {{RadioLinkParameterUpdateIndicationTDD-IEs}},
                       ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationTDD-Extensions}}
   protocolExtensions
                                                                                              OPTIONAL,
   . . .
```

```
RadioLinkParameterUpdateIndicationTDD-IES NBAP-PROTOCOL-IES ::=
     ID id-CRNC-CommunicationContextID
                                             CRITICALITY
                                                            ignore
                                                                       TYPE
                                                                               CRNC-CommunicationContextID
                                                                                                               PRESENCE mandatory }
    { ID id-HSDSCH-TDD-Update-Information
                                                            ignore
                                                                       TYPE
                                                                               HSDSCH-TDD-Update-Information
                                                                                                                  PRESENCE optional },
                                             CRITICALITY
    . . .
RadioLinkParameterUpdateIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- MBMS NOTIFICATION UPDATE COMMAND
MBMSNotificationUpdateCommand ::= SEQUENCE {
                          ProtocolIE-Container
                                                {{ MBMSNotificationUpdateCommand-IEs}},
   protocolIEs
   protocolExtensions
                          ProtocolExtensionContainer {{ MBMSNotificationUpdateCommand-Extensions}}
                                                                                                    OPTIONAL,
MBMSNotificationUpdateCommand-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                             CRITICALITY ignore TYPE C-ID
                                                                                                 PRESENCE mandatory
     ID id-CommonPhysicalChannelID
                                             CRITICALITY ignore TYPE CommonPhysicalChannelID
                                                                                                 PRESENCE mandatory
     ID id-Modification-Period
                                             CRITICALITY ignore TYPE Modification-Period
                                                                                                 PRESENCE optional
     ID id-MICH-CFN
                                             CRITICALITY ignore TYPE MICH-CFN
                                                                                                 PRESENCE mandatory
    { ID id-NI-Information-NotifUpdateCmd
                                             CRITICALITY ignore TYPE NI-Information
                                                                                                 PRESENCE mandatory
    . . .
MBMSNotificationUpdateCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
END
9.3.4 Information Elements Definitions
-- Information Element Definitions
__*********************************
NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
```

```
maxNrOfRLs,
maxNrOfTFCs.
maxNrOfErrors.
maxCTFC.
maxNrOfTFs.
maxTTI-count,
maxRateMatching,
maxCodeNrComp-1,
maxHS-PDSCHCodeNrComp-1,
maxHS-SCCHCodeNrComp-1,
maxNrOfCellSyncBursts,
maxNrOfCodeGroups,
maxNrOfMeasNCell,
maxNrOfMeasNCell-1,
maxNrOfReceptsPerSyncFrame,
maxNrOfTFCIGroups,
maxNrOfTFCI1Combs,
maxNrOfTFCI2Combs,
maxNrOfTFCI2Combs-1,
maxNrOfSF,
maxTGPS,
maxNrOfUSCHs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfDPCHs.
maxNrOfDPCHLCRs.
maxNrOfCodes,
maxNrOfDSCHs,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDCHs,
maxNrOfLevels,
maxNoGPSItems,
maxNoSat,
maxNrOfCellPortionsPerCell,
maxNrOfCellPortionsPerCell-1,
maxNrOfHSSCCHs,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfMACdPDUIndexes,
maxNrOfMACdPDUIndexes-1,
maxNrOfNIs,
maxNrOfPriorityQueues,
maxNrOfPrioritvOueues-1,
maxNrOfHARQProcesses,
maxNrOfSvncDLCodesLCR,
maxNrOfSyncFramesLCR,
maxNrOfContextsOnUeList,
maxNrOfPriorityClasses,
maxNrOfSatAlmanac-maxNoSat,
maxE-AGCH-CodeNrComp-1,
maxE-RGCH-E-HICH-CodeNrComp-1,
maxNrOfDDIs,
```

```
maxNrOfE-AGCHs.
    maxNrOfEDCHMACdFlows.
   maxNrOfEDCHMACdFlows-1.
    maxNrOfE-RGCHs-E-HICHs.
    maxNrofSiqSeqRGHI-1,
    id-MessageStructure,
    id-ReportCharacteristicsType-OnModification,
    id-Rx-Timing-Deviation-Value-LCR,
    id-SFNSFNMeasurementValueInformation,
    id-SFNSFNMeasurementThresholdInformation,
    id-TUTRANGPSMeasurementValueInformation.
    id-TUTRANGPSMeasurementThresholdInformation.
    id-TypeOfError,
    id-transportlayeraddress,
    id-bindingID,
    id-Angle-Of-Arrival-Value-LCR,
    id-SyncDLCodeIdThreInfoLCR,
    id-neighbouringTDDCellMeasurementInformationLCR,
    id-HS-SICH-Reception-Quality,
    id-HS-SICH-Reception-Quality-Measurement-Value,
    id-Initial-DL-Power-TimeslotLCR-InformationItem,
    id-Maximum-DL-Power-TimeslotLCR-InformationItem,
    id-Minimum-DL-Power-TimeslotLCR-InformationItem,
    id-Received-total-wide-band-power-For-CellPortion,
    id-Received-total-wide-band-power-For-CellPortion-Value,
    id-Transmitted-Carrier-Power-For-CellPortion,
    id-Transmitted-Carrier-Power-For-CellPortion-Value,
    id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission,
    id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion,
    id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue,
    id-HS-DSCHRequiredPowerValueInformation,
    id-HS-DSCHProvidedBitRateValueInformation.
    id-HS-DSCHRequiredPowerValue,
    id-HS-DSCHRequiredPowerValue-For-Cell-Portion,
    id-HS-DSCHRequiredPowerValueInformation-For-CellPortion,
    id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion,
    id-Best-Cell-Portions-Value.
    id-Unidirectional-DCH-Indicator,
    id-SAT-Info-Almanac-ExtItem,
    id-TnlQos,
    id-UpPTSInterferenceValue,
    id-HARO-Preamble-Mode,
    id-DLTransmissionBranchLoadValue
FROM NBAP-Constants
    Criticality,
    ProcedureID,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM NBAP-CommonDataTypes
    NBAP-PROTOCOL-IES,
```

```
ProtocolExtensionContainer{},
    ProtocolIE-Single-Container{},
   NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers;
-- ------
__ ______
AckNack-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
Ack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
Acknowledged-PCPCH-access-preambles ::= INTEGER (0..15,...)
-- According to mapping in [22].
Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)
-- According to mapping in [22].
AddorDeleteIndicator ::= ENUMERATED {
    add,
    delete
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
    . . .
Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
       tGPSID
                       TGPSID,
                       TGPRC,
       tGPRC
       tGCFN
                       CFN.
                           ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
       iE-Extensions
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AICH-Power ::= INTEGER (-22..5)
-- Offset in dB.
AICH-TransmissionTiming ::= ENUMERATED {
```

```
ν0,
   v1
AllocationRetentionPriority ::= SEQUENCE {
   priorityLevel
                             PriorityLevel,
   pre-emptionCapability
                             Pre-emptionCapability,
   pre-emptionVulnerability
                             Pre-emptionVulnerability,
   iE-Extensions
                             ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    . . .
AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Angle-Of-Arrival-Value-LCR ::= SEOUENCE {
   aOA-LCR
                             AOA-LCR,
   aOA-LCR-Accuracy-Class
                             AOA-LCR-Accuracy-Class,
                             ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
   iE-Extensions
Angle-Of-Arrival-Value-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AOA-LCR ::= INTEGER (0..719)
-- Angle Of Arrival for 1.28Mcps TDD
AOA-LCR-Accuracy-Class ::= ENUMERATED {a,b,c,d,e,f,g,h,...}
APPreambleSignature ::= INTEGER (0..15)
APSubChannelNumber ::= INTEGER (0..11)
AvailabilityStatus ::= ENUMERATED {
   empty,
   in-test,
   failed,
   power-off,
   off-line,
   off-duty,
   dependency,
   degraded,
   not-installed,
   log-full,
-- -----
```

```
BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed
Best-Cell-Portions-Value::= SEOUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Best-Cell-Portions-Item
Best-Cell-Portions-Item ::= SEOUENCE {
    cellPortionID
                              CellPortionID,
    sIRValue
                              SIR-Value,
                              ProtocolExtensionContainer { { Best-Cell-Portions-Item-ExtIEs} } OPTIONAL,
   iE-Extensions
Best-Cell-Portions-Item-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
BindingID ::= OCTET STRING (SIZE (1..4, ...))
-- If the Binding ID includes a UDP port, the UDP port is included in octet 1 and 2. The first octet of
-- the UDP port field is included in the first octet of the Binding ID.
BetaCD ::= INTEGER (0..15)
BlockingPriorityIndicator ::= ENUMERATED {
   high,
   normal,
   low,
-- High priority: Block resource immediately.
-- Normal priority: Block resource when idle or upon timer expiry.
-- Low priority: Block resource when idle.
SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
-- -----
-- ------
Cause ::= CHOICE {
   radioNetwork
                          CauseRadioNetwork,
    transport
                      CauseTransport,
   protocol
                          CauseProtocol,
   misc
                          CauseMisc,
    . . .
CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
```

```
oam-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified.
    abstract-syntax-error-falsely-constructed-message,
CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    rl-already-ActivatedOrAllocated,
    nodeB-Resources-unavailable,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    requested-configuration-not-supported,
    synchronisation-failure,
    priority-transport-channel-established,
    sIB-Origination-in-Node-B-not-Supported,
    requested-tx-diversity-mode-not-supported,
    unspecified,
    bCCH-scheduling-error,
    measurement-temporarily-not-available,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    s-cipch-not-supported,
    combining-not-supported,
    ul-sf-not-supported,
    dl-SF-not-supported,
    common-transport-channel-type-not-supported,
    dedicated-transport-channel-type-not-supported,
    downlink-shared-channel-type-not-supported,
    uplink-shared-channel-type-not-supported,
    cm-not-supported,
    tx-diversity-no-longer-supported,
    unknown-Local-Cell-ID,
    number-of-UL-codes-not-supported,
    information-temporarily-not-available,
    information-provision-not-supported-for-the-object,
    cell-synchronisation-not-supported,
```

```
cell-synchronisation-adjustment-not-supported,
    dpc-mode-change-not-supported,
    iPDL-already-activated,
    iPDL-not-supported,
    iPDL-parameters-not-available,
    frequency-acquisition-not-supported,
    power-balancing-status-not-compatible,
    requested-typeofbearer-re-arrangement-not-supported,
    signalling-Bearer-Re-arrangement-not-supported,
    bearer-Re-arrangement-needed,
    delayed-activation-not-supported,
    rl-timing-adjustment-not-supported,
    mich-not-supported,
    harq-preamble-mode-not-supported,
    f-DPCH-not-supported
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    . . .
CCTrCH-ID ::= INTEGER (0..15)
CDSubChannelNumbers ::= BIT STRING {
                                        subCh11(0),
                                        subCh10(1),
                                        subCh9(2),
                                        subCh8(3),
                                        subCh7(4),
                                        subCh6(5),
                                        subCh5(6),
                                        subCh4(7),
                                        subCh3(8),
                                        subCh2(9),
                                        subCh1(10),
                                        subCh0(11)
                                        } (SIZE (12))
CellParameterID ::= INTEGER (0..127,...)
CellPortionID ::= INTEGER (0..maxNrOfCellPortionsPerCell-1,...)
CellSyncBurstCode ::= INTEGER(0..7, ...)
CellSyncBurstCodeShift ::= INTEGER(0..7)
CellSyncBurstRepetitionPeriod ::= INTEGER (0..4095)
CellSyncBurstSIR ::= INTEGER (0..31)
CellSyncBurstTiming ::= CHOICE {
    initialPhase
                            INTEGER (0..1048575,...),
```

```
steadyStatePhase
                            INTEGER (0..255,...)
CellSyncBurstTimingLCR ::= CHOICE {
    initialPhase
                            INTEGER (0..524287,...),
    steadyStatePhase
                            INTEGER (0..127,...)
CellSyncBurstTimingThreshold ::= INTEGER(0..254)
CFN ::= INTEGER (0..255)
Channel-Assignment-Indication ::= ENUMERATED {
    cA-Active.
    cA-Inactive
ChipOffset ::= INTEGER (0..38399)
-- Unit Chip
C-ID ::= INTEGER (0..65535)
Closedlooptimingadjustmentmode ::= ENUMERATED {
    adi-1-slot,
    adj-2-slot,
    . . .
CommonChannelsCapacityConsumptionLaw ::= SEOUENCE (SIZE(1..maxNrOfSF)) OF
    SEQUENCE {
        dl-Cost
                    INTEGER (0..65535),
        ul-Cost
                    INTEGER (0..65535),
        iE-Extensions
                            ProtocolExtensionContainer { { CommonChannelsCapacityConsumptionLaw-ExtIEs } }
CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass
                                            TUTRANGPSAccuracyClass,
    . . .
CommonMeasurementType ::= ENUMERATED
    received-total-wide-band-power,
    transmitted-carrier-power,
    acknowledged-prach-preambles,
    ul-timeslot-iscp,
    acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles,
    uTRAN-GPS-Timing-of-Cell-Frames-for-UE-Positioning,
```

```
sFN-SFN-Observed-Time-Difference,
    transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission.
    hS-DSCH-Required-Power.
    hS-DSCH-Provided-Bit-Rate,
    received-total-wide-band-power-for-cellPortion,
    transmitted-carrier-power-for-cellPortion,
    transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission-for-cellPortion,
    upPTS-Interference,
    dLTransmissionBranchLoad,
    hS-DSCH-Required-Power-for-cell-portion,
    hS-DSCH-Provided-Bit-Rate-for-cell-portion
CommonMeasurementValue ::= CHOICE {
    transmitted-carrier-power
                                            Transmitted-Carrier-Power-Value,
    received-total-wide-band-power
                                            Received-total-wide-band-power-Value,
    acknowledged-prach-preambles
                                            Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP
                                            UL-TimeslotISCP-Value,
    acknowledged-PCPCH-access-preambles
                                            Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles
                                            Detected-PCPCH-access-preambles,
    extension-CommonMeasurementValue
                                            Extension-CommonMeasurementValue
Extension-CommonMeasurementValue
                                    ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}
Extension-CommonMeasurementValueIE NBAP-PROTOCOL-IES ::= {
      ID id-TUTRANGPSMeasurementValueInformation
                                                            CRITICALITY ignore TYPE TUTRANGPSMeasurementValueInformation
                                                                                                                             PRESENCE mandatory }
      ID id-SFNSFNMeasurementValueInformation
                                                            CRITICALITY ignore TYPE SFNSFNMeasurementValueInformation
                                                                                                                             PRESENCE mandatory }
     ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission
                                                                                        CRITICALITY ignore TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue
                                                                                     PRESENCE mandatory } |
      ID id-HS-DSCHRequiredPowerValueInformation
                                                            CRITICALITY ignore TYPE HS-DSCHRequiredPower
                                                                                                                             PRESENCE mandatory }
      ID id-HS-DSCHProvidedBitRateValueInformation
                                                            CRITICALITY ignore TYPE HS-DSCHProvidedBitRate
                                                                                                                             PRESENCE mandatory } |
     ID id-Transmitted-Carrier-Power-For-CellPortion-Value CRITICALITY ignore TYPE Transmitted-Carrier-Power-For-CellPortion-Value PRESENCE
mandatory } |
    { ID id-Received-total-wide-band-power-For-CellPortion-Value
                                                                    CRITICALITY ignore TYPE Received-total-wide-band-power-For-CellPortion-Value
    PRESENCE mandatory } |
    { ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue CRITICALITY ignore TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue
                                                                                                 PRESENCE mandatory } |
    { ID id-UpPTSInterferenceValue
                                                                    CRITICALITY ignore TYPE UppTSInterferenceValue
                                                                                                                                            PRESENCE
mandatory } |
    { ID id-DLTransmissionBranchLoadValue
                                                                    CRITICALITY ignore TYPE DLTransmissionBranchLoadValue
    PRESENCE mandatory } |
    { ID id-HS-DSCHRequiredPowerValueInformation-For-CellPortion
                                                                    CRITICALITY ignore TYPE HS-DSCHRequiredPowerValueInformation-For-CellPortion
    PRESENCE mandatory } |
    { ID id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion CRITICALITY ignore TYPE HS-DSCHProvidedBitRateValueInformation-For-CellPortion
    PRESENCE mandatory }
CommonMeasurementValueInformation ::= CHOICE {
    measurementAvailable
                                CommonMeasurementAvailable,
    measurementnotAvailable
                                CommonMeasurementnotAvailable
```

```
CommonMeasurementAvailable::= SEQUENCE {
    commonmeasurement.Value
                                CommonMeasurementValue,
    ie-Extensions
                                    ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }
                                                                                                                  OPTIONAL.
CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementnotAvailable ::= NULL
CommonPhysicalChannelID ::= INTEGER (0..255)
Common-PhysicalChannel-Status-Information ::= SEQUENCE {
    commonPhysicalChannelID
                                    CommonPhysicalChannelID,
    resourceOperationalState
                                        ResourceOperationalState,
                                        AvailabilityStatus,
    availabilityStatus
    iE-Extensions
                                        ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs} }
                                                                                                                                 OPTIONAL,
    . . .
Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonTransportChannelID ::= INTEGER (0..255)
CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID
                                        CommonTransportChannelID,
    bindingID
                                        BindingID
                                                                OPTIONAL,
                                        TransportLayerAddress
    transportLayerAddress
                                                                OPTIONAL,
                                        ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-TransportChannel-Status-Information ::= SEQUENCE
    commonTransportChannelID
                                        CommonTransportChannelID,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
                                        ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationControlPortID ::= INTEGER (0..65535)
Compressed-Mode-Deactivation-Flag::= ENUMERATED {
```

```
deactivate,
    maintain-Active
ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"
ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB
CPCH-Allowed-Total-Rate ::= ENUMERATED {
    v15.
    v30,
    v60.
    v120,
    v240,
    v480,
    v960,
    v1920,
    v2880,
    v3840,
    v4800,
    v5760,
CPCHScramblingCodeNumber ::= INTEGER (0..79)
CPCH-UL-DPCCH-SlotFormat ::= INTEGER (0..2,...)
CQI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,...}
COI-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
COI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
CriticalityDiagnostics ::= SEQUENCE {
    procedureID
                                ProcedureID
                                                        OPTIONAL,
    triggeringMessage
                                TriggeringMessage
                                                            OPTIONAL,
    procedureCriticality
                                Criticality
                                                        OPTIONAL,
    transactionID
                                TransactionID
                                                            OPTIONAL,
    iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }
CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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```
CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
   SEQUENCE {
       iECriticality
                           Criticality,
       iE-ID
                           ProtocolIE-ID,
       repetitionNumber
                           RepetitionNumber0
                                                  OPTIONAL.
                           ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} }
       iE-Extensions
                                                                                                    OPTIONAL,
CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
       ID id-MessageStructure
                                                          EXTENSION MessageStructure
                                                                                         PRESENCE optional } |
                                  CRITICALITY ignore
       ID id-TypeOfError
                                  CRITICALITY ignore
                                                          EXTENSION TypeOfError
                                                                                         PRESENCE mandatory },
    . . .
CRNC-CommunicationContextID ::= INTEGER (0..1048575)
CSBMeasurementID ::= INTEGER (0..65535)
CSBTransmissionID ::= INTEGER (0..65535)
__ ______
__ ______
Data-Description-Indicator ::= SEQUENCE (SIZE (1..maxNrOfDDIs)) OF Data-Description-Indicator-Item
Data-Description-Indicator-Item ::= SEQUENCE {
   e-DCH-DDI-Value
                                          E-DCH-DDI-Value,
   associated-E-DCH-MACdFlow-ID
                                          E-DCH-MACdFlow-ID,
   macdPDU-Size
                                          MACdPDU-Size,
   schedulingPriorityIndicator
                                          SchedulingPriorityIndicator,
   mACesGuaranteedBitRate
                                          MACesGuaranteedBitRate
                                                                                                    OPTIONAL,
                                          ProtocolExtensionContainer { { Data-Description-Indicator-Item-ExtIEs} }
   iE-Extensions
                                                                                                                     OPTIONAL,
    . . .
Data-Description-Indicator-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DATA-ID ::= INTEGER (0..3)
DCH-ID ::= INTEGER (0..255)
DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem
DCH-FDD-InformationItem ::= SEQUENCE {
   payloadCRC-PresenceIndicator
                                      PayloadCRC-PresenceIndicator,
   ul-FP-Mode
                                      UL-FP-Mode,
   toAWS
                                      ToAWS,
                                      ToAWE,
   dCH-SpecificInformationList
                                      DCH-Specific-FDD-InformationList,
   iE-Extensions
                                      ProtocolExtensionContainer { | DCH-FDD-InformationItem-ExtIEs } } OPTIONAL,
```

```
DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlOos
                                       CRITICALITY ignore
                                                              EXTENSION TnlOos
                                                                                      PRESENCE optional },
   . . .
DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item
DCH-Specific-FDD-Item ::=
                           SEQUENCE {
   dCH-ID
                                       DCH-ID,
   ul-TransportFormatSet
                                       TransportFormatSet,
   dl-TransportFormatSet
                                       TransportFormatSet,
    allocationRetentionPriority
                                       AllocationRetentionPriority,
    frameHandlingPriority
                                       FrameHandlingPriority,
    qE-Selector
                                       OE-Selector,
   iE-Extensions
                                       ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs} } OPTIONAL,
    . . .
DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Unidirectional-DCH-Indicator
                                         CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator PRESENCE optional },
    . . .
DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem
DCH-InformationResponseItem ::= SEQUENCE {
   dCH-ID
                                                   DCH-ID,
   bindingID
                                                   BindingID
                                                                          OPTIONAL,
                                                   TransportLayerAddress OPTIONAL,
    transportLayerAddress
   iE-Extensions
                                                   OPTIONAL,
    . . .
DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
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,
   dCH-SpecificInformationList
                                       DCH-Specific-TDD-InformationList,
                                           ProtocolExtensionContainer { { DCH-TDD-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                              OPTIONAL,
    . . .
DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlQos
                                       CRITICALITY ignore
                                                              EXTENSION TnlQos
                                                                                      PRESENCE optional },
```

```
DCH-Specific-TDD-InformationList ::= SEOUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item
DCH-Specific-TDD-Item ::= SEQUENCE {
   dCH-ID
                                           DCH-ID,
   ul-CCTrCH-ID
                                           CCTrCH-ID,
   dl-CCTrCH-ID
                                           CCTrCH-ID,
   ul-TransportFormatSet
                                           TransportFormatSet,
   dl-TransportFormatSet
                                           TransportFormatSet,
    allocationRetentionPriority
                                           AllocationRetentionPriority,
    frameHandlingPriority
                                           FrameHandlingPriority,
   qE-Selector
                                           OE-Selector
                                                                          OPTIONAL.
    -- This IE shall be present if DCH is part of set of Coordinated DCHs
   iE-Extensions
                                           ProtocolExtensionContainer { { DCH-Specific-TDD-Item-ExtIEs} }
                                                                                                           OPTIONAL,
    . . .
DCH-Specific-TDD-Item-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Unidirectional-DCH-Indicator
                                          CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator PRESENCE optional },
    . . .
FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem
FDD-DCHs-to-ModifyItem ::= SEQUENCE {
   ul-FP-Mode
                                       UL-FP-Mode
                                                       OPTIONAL,
   toAWS
                                       ToAWS
                                                       OPTIONAL,
    toAWE
                                       ToAWE
                                                      OPTIONAL,
                                       TransportBearerRequestIndicator,
    transportBearerRequestIndicator
   dCH-SpecificInformationList
                                       DCH-ModifySpecificInformation-FDD,
   iE-Extensions
                                       ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-ExtIEs} } }
                                                                                                        OPTIONAL,
FDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlOos
                                                                                      PRESENCE optional },
                                       CRITICALITY ignore
                                                              EXTENSION TnlOos
DCH-ModifySpecificInformation-FDD::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD
DCH-ModifySpecificItem-FDD::=
                               SEQUENCE {
   dCH-ID
                                                   DCH-ID.
   ul-TransportFormatSet
                                                   TransportFormatSet
                                                                              OPTIONAL,
    dl-TransportFormatSet
                                                   TransportFormatSet
                                                                              OPTIONAL,
   allocationRetentionPriority
                                                   AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                   FrameHandlingPriority
                                                                              OPTIONAL,
                                                   iE-Extensions
                                                                                                                         OPTIONAL,
DCH-ModifySpecificItem-FDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
```

```
TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD
DCH-ModifyItem-TDD ::= SEQUENCE {
   ul-FP-Mode
                                    UL-FP-Mode
                                                   OPTIONAL,
   toAWS
                                    ToAWS
                                                   OPTIONAL,
                                                   OPTIONAL,
   toAWE
                                    TOAWE
   transportBearerRequestIndicator
                                    TransportBearerRequestIndicator,
   dCH-SpecificInformationList
                                    DCH-ModifySpecificInformation-TDD,
                                    ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-ExtIEs} }
   iE-Extensions
                                                                                                     OPTIONAL,
TDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-TnlOos
                                    CRITICALITY ignore
                                                                                 PRESENCE optional },
                                                           EXTENSION TnlOos
   . . .
DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD
DCH-ModifySpecificItem-TDD ::= SEQUENCE {
   dCH-ID
                                                DCH-ID,
   ul-CCTrCH-ID
                                                CCTrCH-ID
                                                                         OPTIONAL,
   dl-CCTrCH-ID
                                                CCTrCH-ID
                                                                         OPTIONAL,
   ul-TransportFormatSet
                                                TransportFormatSet
                                                                         OPTIONAL,
   dl-TransportFormatSet
                                                TransportFormatSet
                                                                         OPTIONAL,
   allocationRetentionPriority
                                                AllocationRetentionPriority OPTIONAL,
   frameHandlingPriority
                                                FrameHandlingPriority
                                                                         OPTIONAL,
   iE-Extensions
                                                OPTIONAL,
   . . .
DCH-ModifySpecificItem-TDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
   SEQUENCE {
       dl-Cost-1
                      INTEGER (0..65535),
       dl-Cost-2
                     INTEGER (0..65535),
       ul-Cost-1
                      INTEGER (0..65535),
       ul-Cost-2
                      INTEGER (0..65535),
                         iE-Extensions
                                                                                                       OPTIONAL,
   . . .
DedicatedChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementType ::= ENUMERATED {
```

```
sir,
   sir-error.
   transmitted-code-power,
   rx-timing-deviation,
   round-trip-time,
   rx-timing-deviation-LCR,
   angle-Of-Arrival-LCR,
   hs-sich-quality,
   best-Cell-Portions
DedicatedMeasurementValue ::= CHOICE {
   sIR-Value
                               SIR-Value,
   sIR-ErrorValue
                               SIR-Error-Value,
   transmittedCodePowerValue
                                  Transmitted-Code-Power-Value,
                                  RSCP-Value,
   rxTimingDeviationValue
                                  Rx-Timing-Deviation-Value,
   roundTripTime
                                  Round-Trip-Time-Value,
   extension-DedicatedMeasurementValue
                                      Extension-DedicatedMeasurementValue
Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}
Extension-DedicatedMeasurementValueIE NBAP-PROTOCOL-IES ::= {
     ID id-Angle-Of-Arrival-Value-LCR CRITICALITY reject TYPE Angle-Of-Arrival-Value-LCR PRESENCE mandatory }
     ID id-Best-Cell-Portions-Value
                                  CRITICALITY reject TYPE Best-Cell-Portions-Value PRESENCE mandatory },
   . . .
DedicatedMeasurementValueInformation ::= CHOICE {
   measurementAvailable
                           DedicatedMeasurementAvailable,
                           DedicatedMeasurementnotAvailable
   measurementnotAvailable
DedicatedMeasurementAvailable::= SEOUENCE {
   dedicatedmeasurement.Value
                               DedicatedMeasurementValue,
   CFN
                                                       OPTIONAL,
                               ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }
   ie-Extensions
                                                                                                    OPTIONAL,
   . . .
DedicatedMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementnotAvailable ::= NULL
DelayedActivation ::= CHOICE {
```

```
CFN,
    cfn
    separate-indication
                           NULL
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,
Activate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Deactivate-Info ::= SEQUENCE {
    deactivation-type
                           Execution-Type,
                           ProtocolExtensionContainer { { Deactivate-Info-ExtIEs} }
   iE-Extensions
                                                                                         OPTIONAL,
    . . .
Deactivate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Execution-Type ::= CHOICE {
    synchronised
                   CFN,
    unsynchronised NULL
Detected-PCPCH-access-preambles ::= INTEGER (0..240,...)
-- According to mapping in [22].
                       ::= INTEGER (0..30)
DeltaSIR
-- Unit dB, Step 0.1 dB, Range 0...3 dB.
DGPSCorrections ::= SEQUENCE {
                        GPSTOW,
  gpstow
  status-health
                        GPS-Status-Health,
   satelliteinfo
                        SAT-Info-DGPSCorrections.
                        ie-Extensions
                                                                                     OPTIONAL,
DGPSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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DGPSThresholds ::= SEOUENCE {
       prcdeviation
                                                             PRCDeviation.
       ie-Extensions
                                                             OPTIONAL,
DGPSThresholds-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DiscardTimer ::= ENUMERATED
\{v20, v40, v60, v80, v100, v120, v140, v160, v180, v200, v250, v300, v400, v500, v750, v1000, v1250, v1500, v1750, v2000, v2500, v3000, v3500, v4000, v4500, v5000, v7500, v1000, v10000, v10000,
DiversityControlField ::= ENUMERATED
          may,
          must,
          must-not,
DiversityMode ::= ENUMERATED {
          none,
          sTTD,
          closed-loop-model,
          closed-loop-mode2,
DL-DPCH-SlotFormat ::= INTEGER (0..16,...)
DL-DPCH-TimingAdjustment ::= ENUMERATED {
          timing-advance,
          timing-delay
DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem
DL-Timeslot-InformationItem ::= SEQUENCE {
          timeSlot
                                                                                                                 TimeSlot,
          midambleShiftAndBurstType
                                                                                                                MidambleShiftAndBurstType,
                                                                                                                TFCI-Presence,
          tFCI-Presence
          dL-Code-Information
                                                                                                                TDD-DL-Code-Information,
          iE-Extensions
                                                                                                                OPTIONAL,
DL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-TimeslotLCR-InformationItem
```

```
DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR.
    midambleShiftLCR
                                            MidambleShiftLCR.
    t.FCI-Presence
                                            TFCI-Presence.
    dL-Code-LCR-Information
                                            TDD-DL-Code-LCR-Information,
                                            ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
DL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Initial-DL-Power-TimeslotLCR-InformationItem
                                                            CRITICALITY ignore
                                                                                  EXTENSION DL-Power
                                                                                                         PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-Maximum-DL-Power-TimeslotLCR-InformationItem
                                                            CRITICALITY ignore
                                                                                                         PRESENCE optional }
                                                                                  EXTENSION DL-Power
    -- 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
DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
    . . .
DL-or-Global-CapacityCredit ::= INTEGER (0..65535)
DL-Power ::= INTEGER (-350..150)
-- Value = DL-Power/10
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB
DLPowerAveragingWindowSize ::= INTEGER (1..60)
DL-PowerBalancing-Information ::= SEQUENCE {
    powerAdjustmentType
                                        PowerAdjustmentType,
    dLReferencePower
                                        DL-Power
                                                        OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    dLReferencePowerList-DL-PC-Rgst
                                        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'
    iE-Extensions
                                        ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
DL-PowerBalancing-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
DL-ReferencePowerInformationList
                                        ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem
DL-ReferencePowerInformationItem ::= SEOUENCE {
    rL-ID
                                RL-ID,
    dl-Reference-Power
                                DL-Power.
                                ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-ReferencePowerInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dL-PowerBalancing-Activated
DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {
    dL-PowerBalancing-Updated
DL-ScramblingCode ::= INTEGER (0..15)
-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --
DL-TimeslotISCP ::= INTEGER (0..91)
DL-TimeslotISCPInfo ::= SEOUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-TimeslotISCPInfoItem
DL-TimeslotISCPInfoItem ::= SEQUENCE {
    timeSlot
                               TimeSlot,
    dL-TimeslotISCP
                                DL-TimeslotISCP,
    iE-Extensions
                                ProtocolExtensionContainer { {DL-TimeslotISCPInfoItem-ExtIEs} }
                                                                                                     OPTIONAL,
    . . .
DL-TimeslotISCPInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotISCPInfoLCR ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-TimeslotISCPInfoItemLCR
DL-TimeslotISCPInfoItemLCR ::= SEQUENCE {
    timeSlotLCR
                               TimeSlotLCR,
    dL-TimeslotISCP
                                DL-TimeslotISCP,
    iE-Extensions
                                ProtocolExtensionContainer { {DL-TimeslotISCPInfoItemLCR-ExtIEs} }
                                                                                                           OPTIONAL,
DL-TimeslotISCPInfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TPC-Pattern01Count ::= INTEGER (0..30,...)
```

```
DLTransmissionBranchLoadValue ::= INTEGER (0..101,...)
Downlink-Compressed-Mode-Method
                                  ::= ENUMERATED {
   puncturing,
   sFdiv2,
   higher-layer-scheduling,
DPC-Mode ::= ENUMERATED {
   mode0,
   mode1,
   . . .
DPCH-ID ::= INTEGER (0..239)
DSCH-ID ::= INTEGER (0..255)
DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem
DSCH-InformationResponseItem ::= SEQUENCE {
   dSCH-ID
                                                  DSCH-ID,
   bindingID
                                                  BindingID
                                                                             OPTIONAL,
   transportLayerAddress
                                                  TransportLayerAddress
                                                                             OPTIONAL,
   iE-Extensions
                                                  OPTIONAL,
    . . .
DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DSCH-FDD-Common-Information ::= SEQUENCE {
   enhancedDSCHPCIndicator
                                  EnhancedDSCHPCIndicator
                                                             OPTIONAL,
   enhancedDSCHPC
                                  EnhancedDSCHPC
                                                             OPTIONAL,
   -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC Active in the UE".
                                      ProtocolExtensionContainer { { DSCH-FDD-Common-Information-ExtIEs} }
   iE-Extensions
DSCH-FDD-Common-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-FDD-InformationItem
DSCH-FDD-InformationItem ::= SEQUENCE {
   dsch-ID
                                      DSCH-ID,
   transportFormatSet
                                      TransportFormatSet,
                                      AllocationRetentionPriority,
   allocationRetentionPriority
    frameHandlingPriority
                                      FrameHandlingPriority,
                                      ToAWS,
    toAWS
    toAWE
                                      TOAWE,
```

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```
ProtocolExtensionContainer { { DSCH-FDD-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                            OPTIONAL,
DSCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-bindingID
                                                                               BindingID
                                                                                                         optional }
                                           CRITICALITY ignore
                                                                   EXTENSION
                                                                                               PRESENCE
    { ID id-transportlayeraddress
                                           CRITICALITY ignore
                                                                   EXTENSION
                                                                              TransportLayerAddress
                                                                                                         PRESENCE
                                                                                                                     optional },
    . . .
DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem
DSCH-TDD-InformationItem ::= SEQUENCE {
    dscH-ID
                                           DSCH-ID,
    cCTrCH-ID
                                           CCTrCH-ID,
    transportFormatSet
                                           TransportFormatSet,
    allocationRetentionPriority
                                           AllocationRetentionPriority,
    frameHandlingPriority
                                           FrameHandlingPriority,
    toAWS
                                           ToAWS,
    t.oAWE
                                           TOAWE,
    iE-Extensions
                                           ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs} }
                                                                                                               OPTIONAL,
    . . .
DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                       CRITICALITY ignore
                                                                          BindingID
                                                                                                        optional }
                                                               EXTENSION
                                                                                               PRESENCE
    -- 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.
DsField ::= BIT STRING (SIZE (8))
DwPCH-Power ::= INTEGER (-150..400,...)
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
E-AGCH-FDD-Code-Information ::= CHOICE {
    replace
                           E-AGCH-FDD-Code-List,
                           NULL,
    remove
E-AGCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfE-AGCHs)) OF E-AGCH-FDD-Code-Information-Item
E-AGCH-FDD-Code-Information-Item ::= INTEGER (0..maxE-AGCH-CodeNrComp-1)
```

```
E-DCH-Capability ::= ENUMERATED {
    e-DCH-capable.
    e-DCH-non-capable
E-DCH-DDI-Value ::= INTEGER (0..63)
E-DCH-FDD-DL-Control-Channel-Information ::= SEQUENCE {
    e-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                     DL-ScramblingCode
                                                                                                                        OPTIONAL,
    e-AGCH-Channelisation-Code
                                                     FDD-DL-ChannelisationCodeNumber
                                                                                                                        OPTIONAL,
    e-RNTI
                                                     E-RNTI
                                                                                                                        OPTIONAL,
    e-RGCH-E-HICH-Channelisation-Code
                                                     FDD-DL-ChannelisationCodeNumber,
    e-RGCH-Signature-Sequence
                                                     E-RGCH-Signature-Sequence,
    e-HICH-Signature-Sequence
                                                     E-HICH-Signature-Sequence,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-FDD-DL-Control-Channel-Information-ExtIEs} }
                                                                                                                                          OPTIONAL,
    . . .
E-DCH-FDD-DL-Control-Channel-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-FDD-Information ::= SEOUENCE {
                                                     E-DCH-MACdFlows-Information,
    e-DCH-MACdFlows-Information
    ue-E-DCH-Capability-Info
                                                     UE-E-DCH-Capability-Information,
                                                     ProtocolExtensionContainer { { E-DCH-FDD-Information-ExtIEs} } 
    iE-Extensions
                                                                                                                                           OPTIONAL,
E-DCH-FDD-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-FDD-Information-Response ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-InformationResp
                                                     E-DCH-MACdFlow-Specific-InformationResp
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-FDD-Information-Response-ExtIEs } }
                                                                                                                                           OPTIONAL,
E-DCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-FDD-Information-to-Modify ::= SEOUENCE {
    e-DCH-MACdFlow-Specific-Info-to-Modify
                                                     E-DCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                                                           OPTIONAL,
    data-Description-Indicator
                                                     Data-Description-Indicator
                                                                                                                                           OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-FDD-Information-to-Modify-ExtIEs} }
    iE-Extensions
                                                                                                                                           OPTIONAL,
    . . .
E-DCH-FDD-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
E-DCH-MACdflow-ID ::= INTEGER (0..maxNrOfEDCHMACdflows-1)
E-DCH-MACdFlows-Information ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-Info
                                                     E-DCH-MACdFlow-Specific-InfoList,
    data-Description-Indicator
                                                     Data-Description-Indicator,
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlows-Information-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
E-DCH-MACdFlows-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem
E-DCH-MACdFlow-Specific-InfoItem ::= SEOUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
    bindingID
                                                     BindingID
                                                                                                                        OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                                                        OPTIONAL,
    allocationRetentionPriority
                                                     AllocationRetentionPriority,
                                                    Tnl0os
                                                                                                                        OPTIONAL,
    payloadCRC-PresenceIndicator
                                                     PayloadCRC-PresenceIndicator,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     Maximum-Number-of-Retransmissions-For-E-DCH,
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InfoItem-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
E-DCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InformationResp-Item
E-DCH-MACdFlow-Specific-InformationResp-Item ::= SEOUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
    bindingID
                                                     BindingID
                                                                                                                        OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                                                        OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs} }
    iE-Extensions
    OPTIONAL,
E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem-to-Modify
E-DCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                     AllocationRetentionPriority
                                                                                                                        OPTIONAL,
    transportBearerRequestIndicator
                                                     TransportBearerRequestIndicator,
    bindingID
                                                     BindingID
                                                                                                                        OPTIONAL,
```

```
transportLayerAddress
                                                    TransportLayerAddress
                                                                                                                        OPTIONAL,
    tnl0os
                                                    Tnl0os
                                                                                                                        OPTIONAL,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    Maximum-Number-of-Retransmissions-For-E-DCH
                                                                                                                        OPTIONAL.
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs} }
    OPTIONAL,
    . . .
E-DCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdFlows-to-Delete ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-to-Delete-Item
E-DCH-MACdFlow-to-Delete-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                    E-DCH-MACdFlow-ID,
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-to-Delete-Item-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
E-DCH-MACdFlow-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-Physical-Layer-Category ::= INTEGER (0)
-- FFS.
E-DCH-RL-Indication ::= ENUMERATED {
    e-DCH,
    non-e-DCH
E-HICH-Signature-Sequence ::= INTEGER (0..maxNrofSigSeqRGHI-1)
End-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    end-of-audit-sequence,
    not-end-of-audit-sequence
EnhancedDSCHPC ::= SEQUENCE {
    enhancedDSCHPCWnd EnhancedDSCHPCWnd,
    enhancedDSCHPCCounter EnhancedDSCHPCCounter,
    enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
EnhancedDSCHPCCounter ::= INTEGER (1..50)
EnhancedDSCHPCIndicator ::= ENUMERATED {
    enhancedDSCHPCActiveInTheUE,
    enhancedDSCHPCNotActiveInTheUE
EnhancedDSCHPCWnd ::= INTEGER (1..10)
```

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```
EnhancedDSCHPowerOffset ::= INTEGER (-15..0)
E-RGCH-E-HICH-FDD-Code-Information ::= CHOICE {
                           E-RGCH-E-HICH-FDD-Code-List,
    replace
                           NULL,
    remove
E-RGCH-E-HICH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfE-RGCHs-E-HICHs)) OF E-RGCH-E-HICH-FDD-Code-Information-Item
E-RGCH-E-HICH-FDD-Code-Information-Item ::= INTEGER (0..maxE-RGCH-E-HICH-CodeNrComp-1)
E-RGCH-Signature-Sequence ::= INTEGER (0..maxNrofSigSeqRGHI-1)
E-RNTI ::= INTEGER (0..65535)
E-TFCS ::= SEOUENCE {
    -- Coding is FFS
                                                   ProtocolExtensionContainer { {E-TFCS-ExtIEs} }
    iE-Extensions
                                                                                                      OPTIONAL,
    . . .
E-TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-TTI ::= ENUMERATED {
    e-TTI-2ms,
    e-TTI-10ms
-- ------
FDD-DL-ChannelisationCodeNumber ::= INTEGER(0.. 511)
-- According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1--
FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfCodes)) OF FDD-DL-CodeInformationItem
FDD-DL-CodeInformationItem ::= SEQUENCE {
    dl-ScramblingCode
                                           DL-ScramblingCode,
                                           FDD-DL-ChannelisationCodeNumber,
    fdd-DL-ChannelisationCodeNumber
                                                       TransmissionGapPatternSequenceCodeInformation
    transmissionGapPatternSequenceCodeInformation
                                           ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
FDD-DL-CodeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FDD-S-CCPCH-Offset ::= INTEGER (0..149)
```

```
-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --
FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
FirstRLS-Indicator ::= ENUMERATED {
    first-RLS.
    not-first-RLS,
FNReportingIndicator ::= ENUMERATED {
fN-reporting-required,
fN-reporting-not-required
FrameHandlingPriority ::= INTEGER (0..15)
-- 0=lowest priority, 15=highest priority --
FrameAdjustmentValue ::= INTEGER(0..4095)
FrameOffset ::= INTEGER (0..255)
FPACH-Power ::= INTEGER (-150..400,...) -- FPACH-power = power * 10
-- If power <= -15 FPACH shall be set to -150
-- If power >= 40 FPACH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
-- -----
__ _____
                      ::= INTEGER (1..14)
GapLength
-- Unit slot
GapDuration
                      ::= INTEGER (1..144,...)
-- Unit frame
GenericTrafficCategory ::= BIT STRING (SIZE (8))
GPS-Almanac ::= SEQUENCE {
   wn<sub>a</sub>-alm
                       BIT STRING (SIZE (8)),
   sat-info-almanac
                       SAT-Info-Almanac,
   sVGlobalHealth-alm BIT STRING (SIZE (364)) OPTIONAL,
   ie-Extensions
                       ProtocolExtensionContainer { GPS-Almanac-ExtIEs} }
                                                                                OPTIONAL,
GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PRESENCE optional },
    { ID id-SAT-Info-Almanac-ExtItem
                                        CRITICALITY ignore
                                                                           SAT-Info-Almanac-ExtList
                                                                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 NBAP-PROTOCOL-EXTENSION ::= {
GPS-Information ::= SEQUENCE (SIZE (0..maxNoGPSItems)) OF GPS-Information-Item
-- This IE shall be present if the Information Type Item IE indicates "GPS Information"
GPS-Information-Item ::= ENUMERATED {
  gps-navigation-model-and-time-recovery,
  qps-ionospheric-model,
  qps-utc-model,
  qps-almanac,
  gps-rt-integrity,
GPS-RealTime-Integrity ::= CHOICE {
   bad-satellites
                                GPSBadSat-Info-RealTime-Integrity,
    no-bad-satellites
                               NULL
GPSBadSat-Info-RealTime-Integrity ::= SEQUENCE
    sat-info
                                    SATInfo-RealTime-Integrity,
    ie-Extensions
                                    ProtocolExtensionContainer { { GPSBadSat-Info-RealTime-Integrity-ExtIEs} }
                                                                                                                   OPTIONAL,
    . . .
GPSBadSat-Info-RealTime-Integrity-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF GPS-NavandRecovery-Item
GPS-NavandRecovery-Item ::= SEQUENCE {
  tx-tow-nav
                                   INTEGER (0..1048575),
  sat-id-nav
                                   SAT-ID,
  tlm-message-nav
                                   BIT STRING (SIZE (14)),
```

. . .

```
tlm-revd-c-nav
                                   BIT STRING (SIZE (2)),
 ho-word-nav
                                   BIT STRING (SIZE (22)),
 w-n-nav
                                   BIT STRING (SIZE (10)),
  ca-or-p-on-12-nav
                                   BIT STRING (SIZE (2)),
 user-range-accuracy-index-nav
                                   BIT STRING (SIZE (4)),
  sv-health-nav
                                   BIT STRING (SIZE (6)),
 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)),
  qps-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)),
 ie-Extensions
                                   ProtocolExtensionContainer { { GPS-NavandRecovery-Item-ExtIEs} }
                                                                                                         OPTIONAL,
GPS-NavandRecovery-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-RX-POS ::= SEQUENCE {
    latitudeSign
                            ENUMERATED {north, south},
    latitude
                            INTEGER (0..8388607),
    longitude
                            INTEGER (-8388608..8388607),
    directionOfAltitude
                            ENUMERATED {height, depth},
    altitude
                            INTEGER (0..32767),
    iE-Extensions
                            ProtocolExtensionContainer { GPS-RX-POS-ExtIEs} } OPTIONAL,
    . . .
GPS-RX-POS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GPS-Status-Health ::= ENUMERATED {
   udre-scale-1dot0,
   udre-scale-0dot75,
   udre-scale-0dot5,
   udre-scale-0dot3,
   udre-scale-0dot1,
   no-data,
   invalid-data
GPSTOW ::= INTEGER (0..604799)
GPS-UTC-Model ::= SEQUENCE {
   a-one-utc
                         BIT STRING (SIZE (24)),
  a-zero-utc BIT STRING (SIZE (32)),
t-ot-utc BIT STRING (SIZE (8)),
  delta-t-ls-utc BIT STRING (SIZE (8)),
w-n-t-utc BIT STRING (SIZE (8)),
w-n-lsf-utc BIT STRING (SIZE (8)),
dn-utc BIT STRING (SIZE (8)),
  delta-t-lsf-utc BIT STRING (SIZE (8)), ie-Extensions ProtocolExtensionConta
                         OPTIONAL,
GPS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ ______
__ ______
HARQ-MemoryPartitioning ::= CHOICE {
    implicit
                    HARO-MemoryPartitioning-Implicit,
    explicit
                    HARQ-MemoryPartitioning-Explicit,
    . . .
HARQ-MemoryPartitioning-Implicit ::= SEQUENCE {
    number-of-Processes
                                INTEGER (1..8,...),
    iE-Extensions
                                ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Implicit-ExtIEs } }
                                                                                                                   OPTIONAL,
HARQ-MemoryPartitioning-Implicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HARQ-MemoryPartitioning-Explicit
                                    ::= SEQUENCE {
    hARQ-MemoryPartitioningList
                                         HARQ-MemoryPartitioningList,
```

```
ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Explicit-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
HARO-MemoryPartitioning-Explicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HARQ-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) 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,...},
    iE-Extensions
                                        ProtocolExtensionContainer { { HARO-MemoryPartitioningItem-ExtIEs } }
                                                                                                                    OPTIONAL,
HARO-MemoryPartitioningItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HARQ-Preamble-Mode ::= ENUMERATED {
mode0,
mode1
HSDPA-Capability ::= ENUMERATED {hsdpa-capable, hsdpa-non-capable}
HS-DSCHProvidedBitRate ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF HS-DSCHProvidedBitRate-Item
HS-DSCHProvidedBitRate-Item ::= SEQUENCE {
                                        SchedulingPriorityIndicator,
    schedulingPriorityIndicator
    hS-DSCHProvidedBitRateValue
                                        HS-DSCHProvidedBitRateValue,
    iE-Extensions
                                        ProtocolExtensionContainer { { HS-DSCHProvidedBitRate-Item-ExtIEs} }
                                                                                                                 OPTIONAL,
HS-DSCHProvidedBitRate-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
HS-DSCHProvidedBitRateValue ::= INTEGER(0..16777215,...)
-- Unit bit/s, Range 0..2^24-1, Step 1 bit
HS-DSCHProvidedBitRateValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-
DSCHProvidedBitRateValueInformation-For-CellPortion-Item
HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item ::= SEQUENCE{
    cellPortionID
                                    CellPortionID,
   hS-DSCHProvidedBitRateValue
                                    HS-DSCHProvidedBitRateValue,
                                    ProtocolExtensionContainer { {HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item-ExtIEs} } OPTIONAL,
   iE-Extensions
HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPower ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF HS-DSCHRequiredPower-Item
HS-DSCHRequiredPower-Item ::= SEQUENCE {
    schedulingPriorityIndicator
                                            SchedulingPriorityIndicator,
    hS-DSCHRequiredPowerValue
                                            HS-DSCHRequiredPowerValue,
                                            HS-DSCHRequiredPowerPerUEInformation
    hS-DSCHRequiredPowerPerUEInformation
                                                                                                     OPTIONAL,
                                            ProtocolExtensionContainer { { HS-DSCHRequiredPower-Item-ExtIEs} }
    iE-Extensions
                                                                                                                    OPTIONAL,
HS-DSCHRequiredPower-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPowerValue ::= INTEGER(0..1000)
-- Unit %, Range 0 ..1000, Step 0.1%
HS-DSCHRequiredPowerPerUEInformation ::= SEQUENCE (SIZE (1.. maxNrOfContextsOnUeList)) OF HS-DSCHRequiredPowerPerUEInformation-Item
HS-DSCHRequiredPowerPerUEInformation-Item ::= SEQUENCE {
                                            CRNC-CommunicationContextID,
    cRNC-CommunicationContextID
    hS-DSCHRequiredPowerPerUEWeight
                                            HS-DSCHRequiredPowerPerUEWeight
                                                                                OPTIONAL,
                                            ProtocolExtensionContainer { { HS-DSCHRequiredPowerPerUEInformation-Item-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
HS-DSCHRequiredPowerPerUEInformation-Item-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPowerPerUEWeight ::= INTEGER(0..100)
-- Unit %, Range 0 ..100, Step 1%
HS-DSCHRequiredPowerValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-DSCHRequiredPowerValueInformation-
For-CellPortion-Item
```

```
HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item ::= SEQUENCE{
    cellPortionID
                                CellPortionID.
    hS-DSCHRequiredPowerValue
                                HS-DSCHRequiredPowerValue.
    iE-Extensions
                                ProtocolExtensionContainer { { HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIEs} }
                                                                                                                                        OPTIONAL,
    . . .
HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information
                                                 HSDSCH-MACdFlows-Information.
    ueCapability-Info
                                                 UE-Capability-Information,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                 MAChsReorderingBufferSize-for-RLC-UM,
    cgiFeedback-CycleK
                                                 COI-Feedback-Cycle,
    cgiRepetitionFactor
                                                 COI-RepetitionFactor
                                                                                              OPTIONAL,
    -- This IE shall be present if the COI Feedback Cycle k is greater than 0
    ackNackRepetitionFactor
                                                 AckNack-RepetitionFactor,
                                                 COI-Power-Offset,
    cqiPowerOffset
    ackPowerOffset
                                                 Ack-Power-Offset,
    nackPowerOffset
                                                Nack-Power-Offset,
    hsscch-PowerOffset
                                                 HSSCCH-PowerOffset
                                                                                              OPTIONAL,
    measurement-Power-Offset
                                                 Measurement-Power-Offset
                                                                                              OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs} }
                                                                                                                      OPTIONAL,
    . . .
HSDSCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-HARO-Preamble-Mode CRITICALITY reject
                                                         EXTENSION
                                                                     HARO-Preamble-Mode PRESENCE optional },
    . . .
HSDSCH-TDD-Information ::= SEQUENCE {
   hSDSCH-MACdFlows-Information
                                                 HSDSCH-MACdFlows-Information,
    ueCapability-Info
                                                 UE-Capability-Information,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                 MAChsReorderingBufferSize-for-RLC-UM,
    tDD-AckNack-Power-Offset
                                                 TDD-AckNack-Power-Offset,
    iE-Extensions
                                                 ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs} }
                                                                                                                      OPTIONAL,
    . . .
HSDSCH-TDD-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Information-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info-to-Modify
                                                     HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                   OPTIONAL,
    priorityOueueInfotoModify
                                                     PriorityOueue-InfoList-to-Modify
                                                                                                    OPTIONAL,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                     MAChsReorderingBufferSize-for-RLC-UM
                                                                                                    OPTIONAL,
    cgiFeedback-CycleK
                                                     COI-Feedback-Cycle
                                                                                                    OPTIONAL,
                                                                                                               -- For FDD only
    cqiRepetitionFactor
                                                     CQI-RepetitionFactor
                                                                                                    OPTIONAL,
                                                                                                               -- For FDD only
                                                                                                               -- For FDD only
    ackNackRepetitionFactor
                                                     AckNack-RepetitionFactor
                                                                                                    OPTIONAL,
```

```
COI-Power-Offset
    cgiPowerOffset
                                                                                                  OPTIONAL, -- For FDD only
    ackPowerOffset
                                                    Ack-Power-Offset
                                                                                                  OPTIONAL. -- For FDD only
    nackPowerOffset.
                                                    Nack-Power-Offset
                                                                                                  OPTIONAL.
                                                                                                              -- For FDD only
                                                                                                  OPTIONAL, -- For FDD only
    hsscch-PowerOffset
                                                    HSSCCH-PowerOffset
    measurement.-Power-Offset
                                                    Measurement-Power-Offset
                                                                                                  OPTIONAL.
                                                                                                              -- For FDD only
    hSSCCHCodeChangeGrant
                                                    HSSCCH-Code-Change-Grant
                                                                                                  OPTIONAL,
    tDDAckNackPowerOffset
                                                    TDD-AckNack-Power-Offset
                                                                                                  OPTIONAL, -- For TDD only
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs} } OPTIONAL.
HSDSCH-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HARO-Preamble-Mode CRITICALITY reject
                                                        EXTENSION
                                                                    HARO-Preamble-Mode PRESENCE optional },
    . . .
HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEOUENCE {
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                                     OPTIONAL.
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
                                        BindingID
    bindingID
                                                                                     OPTIONAL,
    transportLaverAddress
                                        TransportLaverAddress
                                                                                     OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs} }
                                                                                                                                OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Information-to-Modify-Unsynchronised ::= SEQUENCE
    hsDSCH-MACdFlow-Specific-Info-to-Modify
                                                    HSDSCH-MACdFlow-Specific-InfoList-to-Modify OPTIONAL,
    priorityOueueInfotoModifyUnsynchronised
                                                    PriorityOueue-InfoList-to-Modify-Unsynchronised OPTIONAL,
    cgiPowerOffset
                                                    COI-Power-Offset
                                                                                                  OPTIONAL, -- For FDD only
                                                                                                  OPTIONAL, -- For FDD only
    ackPowerOffset
                                                    Ack-Power-Offset
    nackPowerOffset
                                                    Nack-Power-Offset
                                                                                                  OPTIONAL, -- For FDD only
    hsscch-PowerOffset
                                                    HSSCCH-PowerOffset
                                                                                                  OPTIONAL, -- For FDD only
    tDDAckNackPowerOffset
                                                    TDD-AckNack-Power-Offset
                                                                                                  OPTIONAL, -- For TDD only
                                                    ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-Information-to-Modify-Unsynchronised-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HARO-Preamble-Mode CRITICALITY reject
                                                    EXTENSION HARO-Preamble-Mode PRESENCE optional },
    . . .
HSDSCH-FDD-Information-Response ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-InformationResp
                                                    HSDSCH-MACdFlow-Specific-InformationResp
                                                                                                                 OPTIONAL,
    hsSCCH-Specific-Information-ResponseFDD
                                                    HSSCCH-Specific-InformationRespListFDD
                                                                                                                 OPTIONAL,
    hARQ-MemoryPartitioning
                                                    HARQ-MemoryPartitioning
                                                                                                                 OPTIONAL,
```

```
ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
HSDSCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-TDD-Information-Response ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-InformationResp
                                                     HSDSCH-MACdFlow-Specific-InformationResp
                                                                                                 OPTIONAL,
   hsSCCH-Specific-Information-ResponseTDD
                                                     HSSCCH-Specific-InformationRespListTDD
                                                                                                 OPTIONAL, -- Not Applicable to 1.28Mcps TDD
   hsSCCH-Specific-Information-ResponseTDDLCR
                                                     HSSCCH-Specific-InformationRespListTDDLCR
                                                                                                 OPTIONAL, -- Not Applicable to 3.84Mcps TDD
    hARO-MemoryPartitioning
                                                     HARO-MemoryPartitioning
                                                                                                 OPTIONAL.
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }
                                                                                                                                    OPTIONAL.
HSDSCH-TDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InformationResp-Item
HSDSCH-MACdFlow-Specific-InformationResp-Item ::= SEOUENCE {
    hsDSCHMacdFlow-Id
                                                     HSDSCH-MACdFlow-ID,
    bindingID
                                                     BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                 OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                     HSDSCH-Initial-Capacity-Allocation OPTIONAL,
                                                     ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlows-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info
                                                     HSDSCH-MACdFlow-Specific-InfoList,
    priorityOueue-Info
                                                     PriorityOueue-InfoList,
                                                     ProtocolExtensionContainer { { HSDSCH-MACdFlows-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
HSDSCH-MACdFlows-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem
HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
   hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    bindingID
                                        BindingID
                                                                     OPTIONAL,
```

```
TransportLayerAddress
                                                                    OPTIONAL,
    transportLayerAddress
   iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs} }
                                                                                                                        OPTIONAL,
HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlows-to-Delete ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlows-to-Delete-Item
HSDSCH-MACdFlows-to-Delete-Item ::= SEQUENCE {
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
   iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlows-to-Delete-Item-ExtIEs} }
                                                                                                                    OPTIONAL.
HSDSCH-MACdFlows-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
HSDSCH-Initial-Capacity-Allocation: = SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF HSDSCH-Initial-Capacity-AllocationItem
HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    maximum-MACdPDU-Size
                                    MACdPDU-Size,
   hSDSCH-InitialWindowSize
                                    HSDSCH-InitialWindowSize,
                                    ProtocolExtensionContainer { { HSDSCH-Initial-Capacity-AllocationItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
HSDSCH-Initial-Capacity-AllocationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-InitialWindowSize
                                    ::= INTEGER (1..255)
-- Number of MAC-d PDUs.
HSSCCH-Specific-InformationRespListFDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Codes
HSSCCH-Codes ::= SEOUENCE {
    codeNumber
                                                    INTEGER (0..127),
   iE-Extensions
                                                    ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemFDD-ExtIEs } }
                                                                                                                                         OPTIONAL,
HSSCCH-Specific-InformationRespItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
HSSCCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD
HSSCCH-Specific-InformationRespItemTDD ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType
                                                     MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    hSSICH-Info
                                                     HSSICH-Info,
                                                     ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSSCCH-Specific-InformationRespItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSCCH-Specific-InformationRespListTDDLCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDDLCR
HSSCCH-Specific-InformationRespItemTDDLCR ::= SEQUENCE {
    timeslotLCR
                                                 TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
    first-TDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode,
    hSSICH-InfoLCR
                                                 HSSICH-InfoLCR,
                                                 ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDDLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSSCCH-Specific-InformationRespItemTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
HSSICH-Info ::= SEQUENCE {
   hsSICH-ID
                                                     HS-SICH-ID,
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType
                                                     MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }
                                                                                                                   OPTIONAL,
    . . .
HSSICH-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSICH-InfoLCR ::= SEOUENCE
    hsSICH-ID
                                                     HS-SICH-ID,
    timeslotLCR
                                                     TimeSlotLCR,
    midambleShiftLCR
                                                     MidambleShiftLCR,
    tDD-ChannelisationCode
                                                TDD-ChannelisationCode,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } }
                                                                                                                      OPTIONAL,
```

```
HSSICH-Info-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Reception-Ouality-Value ::= SEQUENCE
    failed-HS-SICH
                    HS-SICH-failed,
    missed-HS-SICH
                            HS-SICH-missed,
    total-HS-SICH
                            HS-SICH-total,
                               ProtocolExtensionContainer { { HS-SICH-Reception-Quality-Value-ExtIEs} } OPTIONAL,
    iE-Extensions
HS-SICH-Reception-Quality-Value-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-failed ::= INTEGER (0..20)
HS-SICH-missed ::= INTEGER (0..20)
HS-SICH-total ::= INTEGER (0..20)
HS-SICH-Reception-Quality-Measurement-Value ::= INTEGER (0..20)
-- According to mapping in [23]
HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)
HSDSCH-RNTI ::= INTEGER (0..65535)
HS-PDSCH-FDD-Code-Information ::= SEQUENCE {
    number-of-HS-PDSCH-codes
                                                   INTEGER (0..maxHS-PDSCHCodeNrComp-1),
   hS-PDSCH-Start-code-number
                                               HS-PDSCH-Start-code-number
                                                                              OPTIONAL,
-- Only included when number of HS-DSCH codes > 0
    iE-Extensions
                               ProtocolExtensionContainer { { HS-PDSCH-FDD-Code-Information-ExtIEs} } OPTIONAL,
HS-PDSCH-FDD-Code-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::=
HS-PDSCH-Start-code-number ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
HS-SCCH-ID ::= INTEGER (0..31)
HS-SICH-ID ::= INTEGER (0..31)
HS-SCCH-FDD-Code-Information::= CHOICE {
    replace
                         HS-SCCH-FDD-Code-List,
   remove
                         NULL,
HS-SCCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-FDD-Code-Information-Item
```

```
HS-SCCH-FDD-Code-Information-Item ::= INTEGER (0..maxHS-SCCHCodeNrComp-1)
HSSCCH-CodeChangeIndicator ::= ENUMERATED {
   hsSCCHCodeChangeNeeded
HSSCCH-Code-Change-Grant
                           ::= ENUMERATED {
    changeGranted
HSDSCH-FDD-Update-Information ::= SEQUENCE {
   hsSCCHCodeChangeIndicator
                                                  HSSCCH-CodeChangeIndicator
                                                                                             OPTIONAL,
   cqiFeedback-CycleK
                                                  CQI-Feedback-Cycle
                                                                                             OPTIONAL,
    cgiRepetitionFactor
                                                  COI-RepetitionFactor
                                                                                             OPTIONAL,
   ackNackRepetitionFactor
                                                  AckNack-RepetitionFactor
                                                                                             OPTIONAL,
    cqiPowerOffset
                                                  COI-Power-Offset
                                                                                             OPTIONAL,
   ackPowerOffset
                                                  Ack-Power-Offset
                                                                                             OPTIONAL,
                                                  Nack-Power-Offset
   nackPowerOffset
                                                                                             OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }
                                                                                                                           OPTIONAL,
    . . .
HSDSCH-FDD-Update-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-TDD-Update-Information ::= SEQUENCE {
   hsSCCHCodeChangeIndicator
                                                  HSSCCH-CodeChangeIndicator
                                                                                             OPTIONAL,
   tDDAckNackPowerOffset
                                                  TDD-AckNack-Power-Offset
                                                                                             OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } }
                                                                                                                           OPTIONAL,
HSDSCH-TDD-Update-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- ------
-- ------
IB-OC-ID ::= INTEGER (1..16)
IB-SG-DATA ::= BIT STRING
-- Contains SIB data fixed or "SIB data variable" in segment as encoded in ref.[18].
IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed
IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}
IB-Type ::= ENUMERATED {
   mIB,
```

```
sB1,
    sB2.
    sIB1.
    sIB2,
    sIB3,
    sIB4,
    sIB5,
    sIB6,
    sIB7,
    sIB8.
    sIB9,
    sIB10,
    sIB11,
    sIB12,
    sIB13,
    sIB13dot1,
    sIB13dot2,
    sIB13dot3,
    sIB13dot4,
    sIB14,
    sIB15,
    sIB15dot1,
    sIB15dot2,
    sIB15dot3,
    sIB16,
    . . . ,
    sIB17,
    sIB15dot4,
    sIB18,
    sIB15dot5
InformationReportCharacteristics ::= CHOICE {
    onDemand
    periodic
                             InformationReportCharacteristicsType-ReportPeriodicity,
    onModification
                            InformationReportCharacteristicsType-OnModification,
InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
                        ReportPeriodicity-Scaledmin,
    min
                        ReportPeriodicity-Scaledhour,
    hours
    . . .
InformationReportCharacteristicsType-OnModification ::= SEQUENCE
    information-thresholds
                                   InformationThresholds
                                                              OPTIONAL,
    ie-Extensions
                                   ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs} } OPTIONAL,
InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
InformationThresholds ::= CHOICE {
                        DGPSThresholds,
    dgps
InformationExchangeID ::= INTEGER (0..1048575)
InformationType ::= SEQUENCE {
    information-Type-Item
                                Information-Type-Item,
    gPSInformation
                                GPS-Information OPTIONAL,
    -- The IE shall be present if the Information Type Item IE indicates "GPS Information".
                                ProtocolExtensionContainer { { Information-Type-ExtIEs} }
    iE-Extensions
                                                                                                  OPTIONAL,
Information-Type-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Information-Type-Item ::= ENUMERATED {
    gpsinformation,
    dgpscorrections,
    gpsrxpos,
Initial-DL-DPCH-TimingAdjustment-Allowed ::= ENUMERATED {
    initial-DL-DPCH-TimingAdjustment-Allowed
InnerLoopDLPCStatus ::= ENUMERATED {
    active,
    inactive
IPDL-Indicator ::= ENUMERATED {
    active,
    inactive
IPDL-FDD-Parameters ::= SEQUENCE {
                                     ENUMERATED{sp5,sp7,sp10,sp15,sp20,sp30,sp40,sp50,...},
    iP-SpacingFDD
    iP-Length
                                     ENUMERATED [len5, len10],
                                    INTEGER(0..63),
    seed
    burstModeParams
                                    BurstModeParams
                                                         OPTIONAL,
    iP-Offset
                                    INTEGER(0..9),
    iE-Extensions
                                    ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs} }
                                                                                                 OPTIONAL,
IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
IPDL-TDD-Parameters ::= SEQUENCE {
   iP-SpacingTDD
                              ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
   iP-Start
                              INTEGER(0..4095),
   iP-Slot
                              INTEGER(0..14),
   iP-PCCPCH
                              ENUMERATED{switchOff-1-Frame,switchOff-2-Frames},
   burstModeParams
                              BurstModeParams
                                             OPTIONAL,
   iE-Extensions
                       ProtocolExtensionContainer { { IPDLTDDParameter-ExtIEs} }
                                                                        OPTIONAL,
IPDL-TDD-Parameters-LCR ::= SEQUENCE {
   iP-SpacingTDD
                              ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
                              INTEGER(0..4095),
   iP-Start
   iP-Sub
                             ENUMERATED{first, second, both},
   burstModeParams
                              BurstModeParams
                                              OPTIONAL,
                      ProtocolExtensionContainer { { IPDLTDDParameterLCR-ExtIEs} }
   iE-Extensions
                                                                            OPTIONAL,
BurstModeParams ::= SEQUENCE {
   burstStart
                                 INTEGER(0..15),
   burstLength
                                 INTEGER(10..25),
   burstFreq
                                 INTEGER(1..16),
   . . .
IPDLTDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLTDDParameterLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- ------
-- ------
-- ------
__ ______
-- -----
-- ------
LimitedPowerIncrease ::= ENUMERATED {
   used,
   not-used
Local-Cell-ID ::= INTEGER (0..268435455)
```

```
MACdPDU-Size ::= INTEGER (1..5000,...)
MACdPDU-Size-Indexlist ::= SEOUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem
MACdPDU-Size-IndexItem ::= SEQUENCE {
   sID
                                     SID,
   macdPDU-Size
                                     MACdPDU-Size,
   iE-Extensions
                                     ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs} }
MACdPDU-Size-IndexItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MACdPDU-Size-Indexlist-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
   macdPDU-Size
                                     MACdPDU-Size,
   iE-Extensions
                                     ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs} } 
                                                                                                                OPTIONAL,
MACdPDU-Size-IndexItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
MACesGuaranteedBitRate ::= INTEGER (0..16777215,...)
MAChsGuaranteedBitRate ::= INTEGER (0..16777215,...)
MAChsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)
-- Unit kBytes
                      ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,...}
MAC-hsWindowSize
MaximumDL-PowerCapability ::= INTEGER(0..500)
-- Unit dBm, Range OdBm .. 50dBm, Step +0.1dB
Maximum-Number-of-Retransmissions-For-E-DCH ::= INTEGER (0..15)
Maximum-PDSCH-Power ::= SEQUENCE {
   maximum-PDSCH-Power-SF4
                              DL-Power
                                             OPTIONAL,
   maximum-PDSCH-Power-SF8
                              DL-Power
                                             OPTIONAL,
   maximum-PDSCH-Power-SF16
                              DL-Power
                                             OPTIONAL,
   maximum-PDSCH-Power-SF32
                              DL-Power
                                             OPTIONAL,
   maximum-PDSCH-Power-SF64
                              DL-Power
                                             OPTIONAL,
   maximum-PDSCH-Power-SF128
                            DL-Power
                                             OPTIONAL,
```

```
maximum-PDSCH-Power-SF256 DL-Power
                                                OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { { Maximum-PDSCH-Power-ExtIEs} }
                                                                                                 OPTIONAL,
Maximum-PDSCH-Power-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB
MaxNrOfUL-DPDCHs ::= INTEGER (1..6)
MaxNrOfUL-E-DPDCHs ::= ENUMERATED {
    \max-1,
   max-2,
    max-4,
    . . .
Max-Number-of-PCPCHes ::= INTEGER (1..64,...)
MaxPRACH-MidambleShifts ::= ENUMERATED {
    shift4.
    shift8,
    . . .
MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement
MeasurementID ::= INTEGER (0..1048575)
Measurement-Power-Offset ::= INTEGER(-12 .. 26)
-- Actual value = IE value * 0.5
MeasurementRecoveryBehavior ::= NULL
MeasurementRecoveryReportingIndicator ::= NULL
MeasurementRecoverySupportIndicator ::= NULL
MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
    SEQUENCE {
       iE-ID
                                ProtocolIE-ID,
        repetitionNumber
                                RepetitionNumber1
                                                        OPTIONAL,
       iE-Extensions
                                ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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```
MICH-CFN ::= INTEGER (0..4095)
MICH-Mode ::= ENUMERATED {
    v18,
    v36,
    v72.
    v144.
MidambleConfigurationLCR ::=
                                ENUMERATED {v2, v4, v6, v8, v10, v12, v14, v16, ...}
MidambleConfigurationBurstType1And3 ::=
                                             ENUMERATED {v4, v8, v16}
MidambleConfigurationBurstType2 ::=
                                         ENUMERATED {v3, v6}
MidambleShiftAndBurstType ::=
                                     CHOICE {
                                         SEQUENCE {
    type1
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                             CHOICE {
            defaultMidamble
                                                 NULL,
            commonMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftLong,
    type2
                                         SEQUENCE {
        midambleConfigurationBurstType2
                                             MidambleConfigurationBurstType2,
        midambleAllocationMode
                                             CHOICE {
            defaultMidamble
                                                 NULL,
            commonMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftShort,
        },
        . . .
                                         SEQUENCE
    type3
        midamble Configuration Burst Type 1 And 3 Midamble Configuration Burst Type 1 And 3,
                                             CHOICE {
        midambleAllocationMode
            defaultMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftLong,
MidambleShiftLong ::=
                                     INTEGER (0..15)
MidambleShiftShort ::=
                                     INTEGER (0..5)
```

```
MidambleShiftLCR ::= SEQUENCE {
    midambleAllocationMode
                                MidambleAllocationMode,
   midambleShift
                                MidambleShiftLong
                                                        OPTIONAL.
    -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
midambleConfigurationLCR
                                MidambleConfigurationLCR,
    iE-Extensions
                                ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }
                                                                                                 OPTIONAL,
MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
MidambleShiftLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MinimumDL-PowerCapability ::= INTEGER(0..800)
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB
MinSpreadingFactor ::= ENUMERATED {
       v4,
        v8.
        v16,
        v32,
        v64,
        v128,
        v256,
        v512
-- TDD Mapping scheme for the minimum spreading factor 1 and 2: "256" means 1, "512" means 2
Modification-Period ::= ENUMERATED { v5120, v10240,...}
ModifyPriorityOueue ::= CHOICE {
                                PriorityQueue-InfoItem-to-Add,
    addPriorityQueue
    modifyPriorityQueue
                                PriorityQueue-InfoItem-to-Modify,
    deletePriorityQueue
                                PriorityQueue-Id,
    . . .
Modulation ::= ENUMERATED {
    qPSK,
    eightPSK,
MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
```

```
v32,
    v64.
    v128.
   v256,
MinUL-ChannelisationCodeLengthforE-DCH-FDD ::= ENUMERATED {
   v4,
    v8,
   v16,
    v32,
   v64,
    . . .
MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
  _____
-- -----
Nack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
NCyclesPerSFNperiod ::= ENUMERATED {
   v1,
   v2,
    v4,
    v8,
    . . . ,
   v16,
   v32,
    v64
NEOT ::= INTEGER (0..8)
NFmax ::= INTEGER (1..64,...)
NRepetitionsPerCyclePeriod ::= INTEGER (2..10)
N-INSYNC-IND ::= INTEGER (1..256)
N-OUTSYNC-IND ::= INTEGER (1..256)
NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
       CHOICE {
               {\tt neighbouringFDDCellMeasurementInformation}
                                                            NeighbouringFDDCellMeasurementInformation, -- FDD only
               {\tt neighbouringTDDCellMeasurementInformation}
                                                            NeighbouringTDDCellMeasurementInformation,
```

```
-- Applicable to 3.84Mcps TDD only
                extension-neighbouringCellMeasurementInformation
                                                                    Extension-neighbouringCellMeasurementInformation
Extension-neighbouringCellMeasurementInformation ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}
Extension-neighbouringCellMeasurementInformationIE NBAP-PROTOCOL-IES ::= {
    { ID id-neighbouringTDDCellMeasurementInformationLCR
                                                            CRITICALITY reject TYPE NeighbouringTDDCellMeasurementInformationLCR PRESENCE
mandatory }, -- Applicable to 1.28Mcps TDD only
NeighbouringFDDCellMeasurementInformation ::= SEOUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    primaryScramblingCode
                                        PrimaryScramblingCode,
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    . . .
NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
    timeSlot
                                        TimeSlot
                                                                        OPTIONAL,
    midambleShiftAndBurstType
                                        MidambleShiftAndBurstType
                                                                        OPTIONAL,
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
    timeSlotLCR
                                        TimeSlotLCR
                                                                OPTIONAL,
                                                                OPTIONAL,
    midambleShiftLCR
                                        MidambleShiftLCR
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs} } OPTIONAL,
NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NI-Information ::= SEQUENCE (SIZE (1..maxNrOfNIs)) OF Notification-Indicator
```

```
Notification-Indicator ::= INTEGER (0..65535)
NodeB-CommunicationContextID ::= INTEGER (0..1048575)
NotificationIndicatorLength ::= ENUMERATED {
   v2,
   v4,
   v8,
   . . .
NumberOfReportedCellPortions ::= INTEGER (1..maxNrOfCellPortionsPerCell,...)
NStartMessage ::= INTEGER (1..8)
NSubCyclesPerCyclePeriod ::= INTEGER (1..16,...)
-- -----
-- ------
PagingIndicatorLength ::= ENUMERATED {
   v2,
   v4,
   v8,
PayloadCRC-PresenceIndicator ::= ENUMERATED {
   cRC-Included,
   cRC-NotIncluded,
PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
PCP-Length ::= ENUMERATED{
   ν0,
   v8
PDSCH-CodeMapping ::= SEQUENCE {
   dl-ScramblingCode
                              DL-ScramblingCode,
   signallingMethod
                                 CHOICE {
```

```
code-Range
                                        PDSCH-CodeMapping-PDSCH-CodeMappingInformationList,
        tFCI-Range
                                        PDSCH-CodeMapping-DSCH-MappingInformationList,
       explicit
                                            PDSCH-CodeMapping-PDSCH-CodeInformationList,
        replace
                                        PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList
                                            ProtocolExtensionContainer { { PDSCH-CodeMapping-ExtIEs} }
    iE-Extensions
                                                                                                           OPTIONAL,
PDSCH-CodeMapping-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-CodeMapping-CodeNumberComp ::= INTEGER (0..maxCodeNrComp-1)
PDSCH-CodeMapping-SpreadingFactor ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
PDSCH-CodeMapping-PDSCH-CodeMappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfCodeGroups)) OF
    SEQUENCE
                                    PDSCH-CodeMapping-SpreadingFactor,
        spreadingFactor
        multi-CodeInfo
                                    PDSCH-Multi-CodeInfo,
        start-CodeNumber
                                        PDSCH-CodeMapping-CodeNumberComp,
        stop-CodeNumber
                                    PDSCH-CodeMapping-CodeNumberComp,
                                        ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs} }
       iE-Extensions
                                                                                                                                         OPTIONAL,
PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-Extles NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-CodeMapping-DSCH-MappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
    SEQUENCE {
       maxTFCI-field2-Value
                                        PDSCH-CodeMapping-MaxTFCI-Field2-Value,
                                    PDSCH-CodeMapping-SpreadingFactor,
        spreadingFactor
       multi-CodeInfo
                                    PDSCH-Multi-CodeInfo,
        codeNumber
                                    PDSCH-CodeMapping-CodeNumberComp,
       iE-Extensions
                                        ProtocolExtensionContainer { { PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs} }
PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PDSCH-CodeMapping-MaxTFCI-Field2-Value ::= INTEGER (1..1023)
PDSCH-CodeMapping-PDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
   SEOUENCE
       spreadingFactor
                                 PDSCH-CodeMapping-SpreadingFactor,
       multi-CodeInfo
                                 PDSCH-Multi-CodeInfo,
       codeNumber
                                 PDSCH-CodeMapping-CodeNumberComp,
       iE-Extensions
                                     ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs} }
                                                                                                                          OPTIONAL,
       . . .
PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList ::= SEOUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
   SEQUENCE {
       tfci-Field2
                                 TFCS-MaxTFCI-field2-Value,
       spreadingFactor
                                 PDSCH-CodeMapping-SpreadingFactor,
       multi-CodeInfo
                                 PDSCH-Multi-CodeInfo,
       codeNumber
                                  PDSCH-CodeMapping-CodeNumberComp,
                                  iE-Extensions
                                                                                                                             OPTIONAL,
   . . .
PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-Multi-CodeInfo ::= INTEGER (1..16)
PDSCH-ID ::= INTEGER (0..255)
PDSCHSet-ID ::= INTEGER (0..255)
PICH-Mode ::= ENUMERATED {
   v18,
   v36,
   v72,
   v144,
    . . .
PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB
PowerAdjustmentType ::= ENUMERATED {
   none,
   common,
   individual
PowerOffset ::= INTEGER (0..24)
```

```
-- PowerOffset = offset * 0.25
-- Unit dB, Range 0dB .. +6dB, Step +0.25dB
PowerRaiseLimit ::= INTEGER (0..10)
PRACH-Midamble ::= ENUMERATED {
    inverted,
    direct.
PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters
PRCDeviation ::= ENUMERATED {
   one,
   two,
   five,
   ten,
PreambleSignatures ::= BIT STRING {
                                     signature15(0),
                                    signature14(1),
                                     signature13(2),
                                     signature12(3),
                                    signature11(4),
                                    signature10(5),
                                     signature9(6),
                                     signature8(7),
                                     signature7(8),
                                     signature6(9),
                                    signature5(10),
                                    signature4(11),
                                    signature3(12),
                                     signature2(13),
                                     signature1(14),
                                     signature0(15)
                                    } (SIZE (16))
PreambleThreshold ::= INTEGER (0..72)
-- 0= -36.0dB, 1= -35.5dB, ..., 72= 0.0dB
PredictedSFNSFNDeviationLimit ::=INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
```

```
Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
PrimaryCPICH-Power ::= INTEGER(-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm
Primary-CPICH-Usage-for-Channel-Estimation ::= ENUMERATED {
primary-CPICH-may-be-used,
primary-CPICH-shall-not-be-used
PrimaryScramblingCode ::= INTEGER (0..511)
PriorityLevel
                            ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority
PriorityQueue-Id ::= INTEGER (0..maxNrOfPriorityQueues-1)
PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF PriorityQueue-InfoItem
PriorityQueue-InfoItem ::= SEQUENCE {
    priorityQueueId
                                        PriorityQueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t.1
                                        T1,
    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,
PriorityOueue-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF ModifyPriorityQueue
PriorityQueue-InfoItem-to-Add ::= SEQUENCE {
    priorityOueueId
                                        PriorityOueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t1
                                        T1,
    discardTimer
                                        DiscardTimer
                                                                                                   OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
                                        MAChsGuaranteedBitRate
    mAChsGuaranteedBitRate
                                                                                                   OPTIONAL,
   macdPDU-Size-Index
                                        MACdPDU-Size-Indexlist,
    rLC-Mode
                                        RLC-Mode,
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Add-ExtIEs} }
    iE-Extensions
                                                                                                                     OPTIONAL,
```

```
PriorityOueue-InfoItem-to-Add-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PriorityQueue-InfoItem-to-Modify ::= SEQUENCE {
    priorityQueueId
                                        PriorityQueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                                   OPTIONAL,
                                                                                                   OPTIONAL,
    t1
    discardTimer
                                        DiscardTimer
                                                                                                   OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize
                                                                                                   OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                                   OPTIONAL,
    macdPDU-Size-Index-to-Modify
                                        MACdPDU-Size-Indexlist-to-Modify
                                                                                                   OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityOueue-InfoItem-to-Modify-ExtIEs} } }
                                                                                                                        OPTIONAL,
    . . .
PriorityQueue-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PriorityQueue-InfoList-to-Modify-Unsynchronised ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF PriorityQueue-InfoItem-to-Modify-Unsynchronised
PriorityQueue-InfoItem-to-Modify-Unsynchronised ::= SEQUENCE {
    priorityOueueId
                                        PriorityOueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                                                     OPTIONAL,
    discardTimer
                                        DiscardTimer
                                                                                                                     OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                                                     OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityOueue-InfoItem-to-Modify-Unsynchronised-ExtIEs} }
                                                                                                                                       OPTIONAL,
PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-RSCP ::= INTEGER (0..91)
-- Mapping of non-negative values according to [23]
PrimaryCCPCH-RSCP-Delta ::= INTEGER (-5..-1,...)
-- Mapping of negative values according to [23]
PropagationDelay ::= INTEGER (0..255)
-- Unit: chips, step size 3 chips
-- example: 0 = 0chip, 1 = 3chips
SCH-TimeSlot ::= INTEGER (0..6)
PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%
PUSCH-ID ::= INTEGER (0..255)
```

```
PUSCHSet-ID ::= INTEGER (0..255)
-- ------
-- ------
OE-Selector ::= ENUMERATED {
   selected,
   non-selected
Qth-Parameter ::= INTEGER (-20..0)
-- Unit dB, Step 1dB
__ ______
__ ______
RACH-SlotFormat ::= ENUMERATED {
   ν0,
   v1,
   v2.
   v3,
RACH-SubChannelNumbers ::= BIT STRING {
                                  subCh11(0),
                                  subCh10(1),
                                  subCh9(2),
                                  subCh8(3),
                                  subCh7(4),
                                  subCh6(5),
                                  subCh5(6),
                                  subCh4(7),
                                  subCh3(8),
                                  subCh2(9),
                                  subCh1(10),
                                  subCh0(11)
                                  } (SIZE (12))
RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item
RL-Specific-DCH-Info-Item ::= SEQUENCE {
   dCH-id
                       DCH-ID,
   bindingID
                       BindingID
                                                                                  OPTIONAL,
   transportlayeraddress TransportLayerAddress
                                                                                  OPTIONAL,
   iE-Extensions
                       ProtocolExtensionContainer { RL-Specific-DCH-Info-Item-ExtIEs} } OPTIONAL,
   . . .
RL-Specific-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
ReferenceClockAvailability ::= ENUMERATED {
    available,
    notAvailable
ReferenceSFNoffset ::= INTEGER (0..255)
RepetitionLength ::= INTEGER (1..63)
RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16.
    v32,
    v64,
    . . .
RepetitionNumber0 ::= INTEGER (0..255)
RepetitionNumber1 ::= INTEGER (1..256)
RefTFCNumber ::= INTEGER (0..3)
ReportCharacteristics ::= CHOICE {
    onDemand
                        NULL,
                        ReportCharacteristicsType-ReportPeriodicity,
    periodic
    event-a
                        ReportCharacteristicsType-EventA,
    event-b
                        ReportCharacteristicsType-EventB,
    event-c
                        ReportCharacteristicsType-EventC,
                        ReportCharacteristicsType-EventD,
    event-d
                        ReportCharacteristicsType-EventE,
    event-e
    event-f
                        ReportCharacteristicsType-EventF,
    extension-ReportCharacteristics
                                        Extension-ReportCharacteristics
Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
Extension-ReportCharacteristicsIE NBAP-PROTOCOL-IES ::= {
    \{ ID id-ReportCharacteristicsType-OnModification \;\; CRITICALITY reject TYPE ReportCharacteristicsType-OnModification \;\; PRESENCE mandatory \}
ReportCharacteristicsType-EventA ::= SEQUENCE {
    measurementThreshold
                                     ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                      OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs} }
                                                                                                                  OPTIONAL,
```

```
ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventB ::= SEQUENCE {
   measurementThreshold
                                    ReportCharacteristicsType-MeasurementThreshold,
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
   measurementHysteresisTime
   iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs} }
                                                                                                                  OPTIONAL,
    . . .
ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventC ::= SEQUENCE {
    measurementIncreaseThreshold
                                    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                                    ReportCharacteristicsType-ScaledMeasurementChangeTime,
   iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs} } 
                                                                                                                  OPTIONAL,
ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold
                                    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
                                    ReportCharacteristicsType-ScaledMeasurementChangeTime,
    measurementChangeTime
   iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs} } 
                                                                                                                  OPTIONAL,
    . . .
ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
ReportCharacteristicsType-EventE ::= SEQUENCE {
    measurement.Threshold1
                                    ReportCharacteristicsType-MeasurementThreshold,
   measurementThreshold2
                                    ReportCharacteristicsType-MeasurementThreshold
                                                                                                 OPTIONAL,
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
   measurementHysteresisTime
                                                                                                 OPTIONAL,
                                    ReportCharacteristicsType-ReportPeriodicity
    reportPeriodicity
                                                                                                 OPTIONAL.
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs} }
    iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventF ::= SEQUENCE {
```

```
measurementThreshold1
                                    ReportCharacteristicsType-MeasurementThreshold,
    measurement.Threshold2
                                    ReportCharacteristicsType-MeasurementThreshold
                                                                                                OPTIONAL.
    measurementHysteresisTime
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                OPTIONAL.
    reportPeriodicity
                                    ReportCharacteristicsType-ReportPeriodicity
                                                                                                OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs} }
                                                                                                                 OPTIONAL.
ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-OnModification ::= SEQUENCE
    measurement.Threshold
                                    ReportCharacteristicsType-MeasurementThreshold,
    iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs} }
                                                                                                                          OPTIONAL,
ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    received-total-wide-band-power
                                                            Received-total-wide-band-power-Value-IncrDecrThres,
    transmitted-carrier-power
                                    Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles
                                            Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP
                                    UL-TimeslotISCP-Value-IncrDecrThres,
    sir
                                SIR-Value-IncrDecrThres,
    sir-error
                                SIR-Error-Value-IncrDecrThres,
    transmitted-code-power
                                    Transmitted-Code-Power-Value-IncrDecrThres,
                                    RSCP-Value-IncrDecrThres,
    rscp
                                    Round-Trip-Time-IncrDecrThres,
    round-trip-time
    acknowledged-PCPCH-access-preambles
                                            Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles
                                            Detected-PCPCH-access-preambles,
    extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold
                                                                                    Extension-ReportCharacteristicsType-
MeasurementIncreaseDecreaseThreshold
Extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold
                                                                            ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementIncreaseDecreaseThresholdIE }}
Extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThresholdIE NBAP-PROTOCOL-IES ::= {
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission
                                                                                            CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory
 ID id-Transmitted-Carrier-Power-For-CellPortion
                                                        CRITICALITY reject TYPE Transmitted-Carrier-Power-Value PRESENCE mandatory }
{ ID id-Received-total-wide-band-power-For-CellPortion CRITICALITY reject TYPE Received-total-wide-band-power-Value-IncrDecrThres
                                                                                                                                         PRESENCE
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue
                                                                                    PRESENCE mandatory }
 ID id-UpPTSInterferenceValue
                                    CRITICALITY reject TYPE
                                                                UpPTSInterferenceValue
                                                                                            PRESENCE mandatory }
ReportCharacteristicsType-MeasurementThreshold ::= CHOICE {
```

```
received-total-wide-band-power
                                                          Received-total-wide-band-power-Value,
    transmitted-carrier-power
                                   Transmitted-Carrier-Power-Value.
    acknowledged-prach-preambles
                                          Acknowledged-PRACH-preambles-Value.
    uL-TimeslotISCP
                                   UL-TimeslotISCP-Value.
    sir
                               SIR-Value.
    sir-error
                               SIR-Error-Value.
    transmitted-code-power
                                   Transmitted-Code-Power-Value,
                                   RSCP-Value,
   rx-timing-deviation
                                   Rx-Timing-Deviation-Value,
    round-trip-time
                                   Round-Trip-Time-Value,
    acknowledged-PCPCH-access-preambles
                                          Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles
                                          Detected-PCPCH-access-preambles,
    extension-ReportCharacteristicsType-MeasurementThreshold
                                                                  Extension-ReportCharacteristicsType-MeasurementThreshold
Extension-ReportCharacteristicsType-MeasurementThreshold
                                                          ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementThresholdIE }}
Extension-ReportCharacteristicsType-MeasurementThresholdIE NBAP-PROTOCOL-IES ::= {
     ID id-TUTRANGPSMeasurementThresholdInformation
                                                      CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation
                                                                                                                        PRESENCE mandatory }
     ID id-SFNSFNMeasurementThresholdInformation
                                                                                                                         PRESENCE mandatory }
                                                      CRITICALITY reject TYPE SFNSFNMeasurementThresholdInformation
                                                                                                                      PRESENCE mandatory } |
     ID id-Rx-Timing-Deviation-Value-LCR
                                                      CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR
     ID id-HS-SICH-Reception-Ouality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Ouality-Measurement-Value PRESENCE mandatory
     ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory}
     ID id-HS-DSCHRequiredPowerValue
                                                      CRITICALITY reject TYPE HS-DSCHRequiredPowerValue
                                                                                                                PRESENCE mandatory}
     PRESENCE mandatory } |
     ID id-Received-total-wide-band-power-For-CellPortion CRITICALITY reject TYPE Received-total-wide-band-power-Value
                                                                                                                         PRESENCE mandatory } |
     ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue
                                                                                 PRESENCE mandatory } |
     ID id-UpPTSInterferenceValue
                                                      CRITICALITY reject TYPE UpPTSInterferenceValue
                                                                                                             PRESENCE mandatory } |
     ID id-DLTransmissionBranchLoadValue
                                                      CRITICALITY reject TYPE DLTransmissionBranchLoadValue
                                                                                                                         PRESENCE mandatory } |
     ID id-HS-DSCHRequiredPowerValue-For-Cell-Portion CRITICALITY reject TYPE HS-DSCHRequiredPowerValue
                                                                                                                         PRESENCE mandatory }
ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
                       MeasurementChangeTime-Scaledmsec,
    msec
MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
   msec
                       MeasurementHysteresisTime-Scaledmsec,
    . . .
MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
```

```
ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
    msec
                        ReportPeriodicity-Scaledmsec,
    min
                        ReportPeriodicity-Scaledmin,
ReportPeriodicity-Scaledmsec ::= INTEGER (1..6000,...)
-- ReportPeriodicity-msec = ReportPeriodicity * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
ReportPeriodicity-Scaledmin ::= INTEGER (1..60,...)
-- Unit min, Range 1min .. 60min(hour), Step 1min
ReportPeriodicity-Scaledhour ::= INTEGER (1..24,...)
-- Unit hour, Range 1hour .. 24hours(day), Step 1hour
ResourceOperationalState ::= ENUMERATED {
    enabled,
    disabled
RL-ID ::= INTEGER (0..31)
RL-Set-ID
                        ::= INTEGER (0..31)
RLC-Mode
           ::= ENUMERATED {
   rLC-AM,
   rLC-UM,
    . . .
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
RNC-ID
                        ::= INTEGER (0..4095)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Received-total-wide-band-power-For-
CellPortion-Value-Item
Received-total-wide-band-power-For-CellPortion-Value-Item ::= SEQUENCE{
    cellPortionID
                                            CellPortionID,
    received-total-wide-band-power-value
                                            Received-total-wide-band-power-Value,
                                            ProtocolExtensionContainer { { Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIEs} }
    iE-Extensions
    OPTIONAL,
```

```
Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]
Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)
RequestedDataValueInformation ::= CHOICE {
    informationAvailable
                              InformationAvailable,
    informationnotAvailable
                              InformationnotAvailable
InformationAvailable::= SEQUENCE {
    requesteddataValue
                          RequestedDataValue,
    ie-Extensions
                          ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs} }
                                                                                              OPTIONAL,
InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
InformationnotAvailable ::= NULL
RequestedDataValue ::= SEOUENCE {
    dqps-corrections
                           DGPSCorrections
                                                                                        OPTIONAL,
    qps-navandrecovery
                           GPS-NavigationModel-and-TimeRecovery
                                                                                            OPTIONAL,
    qps-ionos-model
                           GPS-Ionospheric-Model
                                                                                            OPTIONAL,
    qps-utc-model
                           GPS-UTC-Model
                                                                                        OPTIONAL,
    gps-almanac
                          GPS-Almanac
                                                                                        OPTIONAL,
    gps-rt-integrity
                          GPS-RealTime-Integrity
                                                                                        OPTIONAL,
    gpsrxpos
                          GPS-RX-POS
                                                                                        OPTIONAL,
                          ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }
    iE-Extensions
                                                                                        OPTIONAL,
RequestedDataValue-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
-- According to mapping in [23]
Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
-- According to mapping in [23]
-- -----
-- -----
AdjustmentPeriod
                          ::= INTEGER(1..256)
-- Unit Frame
```

```
SAT-ID ::= INTEGER (0..63)
SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item
SAT-Info-Almanac-Item ::= SEQUENCE {
   data-id
                     DATA-ID,
   sat-id
                     SAT-ID,
   gps-e-alm
                     BIT STRING (SIZE (16)),
   gps-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)),
   gps-af-zero-alm BIT STRING (SIZE (11)),
   qps-af-one-alm
                     BIT STRING (SIZE (11)),
                     ProtocolExtensionContainer { { SAT-Info-Almanac-Item-ExtIEs} }
   ie-Extensions
                                                                                      OPTIONAL.
  -- This GPS-Almanac-Information is for the 1st 16 satellites
SAT-Info-Almanac-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SAT-Info-Almanac-ExtList
                         ::= SEQUENCE (SIZE (1..maxNrOfSatAlmanac-maxNoSat)) OF SAT-Info-Almanac-ExtItem
SAT-Info-Almanac-ExtItem
                        ::= SEQUENCE {
   data-id
                     DATA-ID,
   sat-id
                     SAT-ID,
   gps-e-alm
                     BIT STRING (SIZE (16)),
                    BIT STRING (SIZE (8)),
   gps-toa-alm
   gps-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
                     OPTIONAL,
  -- Includes the GPS-Almanac-Information for 17th through 32nd satellites.
SAT-Info-Almanac-ExtItemIEs NBAP-PROTOCOL-EXTENSION ::= {
SAT-Info-DGPSCorrections ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-DGPSCorrections-Item
SAT-Info-DGPSCorrections-Item ::= SEQUENCE {
```

```
sat-id
                                            SAT-ID,
    iode-daps
                                            BIT STRING (SIZE (8)),
    udre
                                            UDRE.
    prc
                                            PRC,
    range-correction-rate
                                            Range-Correction-Rate,
                                            ProtocolExtensionContainer { { SAT-Info-DGPSCorrections-Item-ExtIEs} } OPTIONAL,
    ie-Extensions
SAT-Info-DGPSCorrections-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SATInfo-RealTime-Integrity ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-RealTime-Integrity-Item
SAT-Info-RealTime-Integrity-Item ::= SEQUENCE {
 bad-sat-id
                  SAT-ID,
                  ProtocolExtensionContainer { { SAT-Info-RealTime-Integrity-Item-ExtIEs} }
 ie-Extensions
                                                                                                  OPTIONAL,
SAT-Info-RealTime-Integrity-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ScaledAdjustmentRatio
                                ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100
MaxAdjustmentStep
                           ::= INTEGER(1..10)
-- Unit Slot
SchedulingPriorityIndicator
                                        ::= INTEGER (0..15)
                                                                -- lowest (0), highest (15)
SID ::= INTEGER (0..maxNrOfMACdPDUIndexes-1)
ScramblingCodeNumber ::= INTEGER (0..15)
Secondary-CPICH-Information-Change ::= CHOICE {
    new-secondary-CPICH
                                        CommonPhysicalChannelID,
    secondary-CPICH-shall-not-be-used NULL,
SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)
Segment-Type ::= ENUMERATED {
        first-segment,
        first-segment-short,
        subsequent-segment,
       last-segment,
       last-segment-short,
        complete-SIB,
        complete-SIB-short,
```

```
Serving-E-DCH-RL-ID ::= CHOICE
    serving-E-DCH-RL-in-this-NodeB
                                                 Serving-E-DCH-RL-in-this-NodeB,
    serving-E-DCH-RL-not-in-this-NodeB
                                                 NULL,
Serving-E-DCH-RL-in-this-NodeB ::= SEQUENCE {
    rL-ID
                                                 RL-ID,
    iE-Extensions
                                                 ProtocolExtensionContainer { { Serving-E-DCH-RL-in-this-NodeB-ExtIEs} } }
                                                                                                                                  OPTIONAL,
    . . .
Serving-E-DCH-RL-in-this-NodeB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
S-FieldLength ::= ENUMERATED {
        v1,
       v2,
        . . .
SFN ::= INTEGER (0..4095)
SFNSFN-FDD ::= INTEGER (0..614399)
SFNSFN-TDD ::= INTEGER (0..40961)
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,
    iE-Extensions
                                    ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} }
                                                                                                                         OPTIONAL,
SFNSFNMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNMeasurementValueInformation ::= SEQUENCE {
    \verb+successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation+ \\
                                                                                          SEOUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uC-Id
                                        UC-Id,
```

```
sFNSFNValue
                                      SFNSFNValue,
           sFNSFNOuality
                                      SFNSFNOuality
                                                                 OPTIONAL,
           sFNSFNDriftRate
                                      SFNSFNDriftRate.
           sFNSFNDriftRateOuality
                                      SFNSFNDriftRateOuality
                                                                 OPTIONAL,
           sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
                              ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
           iE-Extensions
ExtIEs} }
               OPTIONAL,
    unsuccessfull \verb+NeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation
                                                                                    SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
       SEQUENCE {
           uC-Id
                                      UC-Id,
                              ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
           iE-Extensions
ExtIEs} }
               OPTIONAL.
                       iE-Extensions
                                                                                                      OPTIONAL,
SFNSFNMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec
SIB-Originator ::= ENUMERATED {
   nodeB,
   cRNC,
    . . .
SIR-Error-Value ::= INTEGER (0..125)
-- According to mapping in [22]
SFNSFNTimeStampInformation ::= CHOICE {
   sFNSFNTimeStamp-FDD
                          SFN,
   sFNSFNTimeStamp-TDD
                          SFNSFNTimeStamp-TDD,
    . . . }
SFNSFNTimeStamp-TDD::= SEQUENCE {
                       SFN,
    sFN
```

```
timeSlot
                        TimeSlot,
    iE-Extensions
                                    ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} }
                                                                                                   OPTIONAL,
SFNSFNTimeStamp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNValue ::= CHOICE {
    sFNSFN-FDD
                    SFNSFN-FDD,
    sFNSFN-TDD
                    SFNSFN-TDD,
    . . .
SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)
SIR-Value ::= INTEGER (0..63)
-- According to mapping in [22]/[23]
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
SignallingBearerRequestIndicator::= ENUMERATED {bearerRequested}
SpecialBurstScheduling ::= INTEGER (1..256) -- Number of frames between special burst transmission during DTX
SSDT-Cell-Identity ::= ENUMERATED {a, b, c, d, e, f, q, h}
SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
SSDT-Indication ::= ENUMERATED
    ssdt-active-in-the-UE,
    ssdt-not-active-in-the-UE
Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    start-of-audit-sequence,
    not-start-of-audit-sequence
STTD-Indicator ::= ENUMERATED {
    active,
    inactive,
SSDT-SupportIndicator ::= ENUMERATED {
    sSDT-Supported,
    sSDT-not-supported
```

```
SyncCase ::= INTEGER (1..2,...)
SYNCDlCodeId ::= INTEGER (1..32,...)
SyncFrameNumber ::= INTEGER (1..10)
SynchronisationReportCharacteristics ::= SEQUENCE {
    synchronisationReportCharacteristicsType
                                                SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc
                                                SynchronisationReportCharactThreExc
                                                                                        OPTIONAL,
        -- This IE shall be included if the synchronisationReportCharacteristicsType IE is set to 'thresholdExceeding'.
    iE-Extensions
                                                ProtocolExtensionContainer { { SynchronisationReportCharacteristics-ExtIEs } } OPTIONAL,
SynchronisationReportCharacteristics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SyncDLCodeIdThreInfoLCR CRITICALITY ignore EXTENSION
                                                                    SyncDLCodeIdThreInfoLCR
                                                                                                 PRESENCE optional },
SynchronisationReportCharactThreExc ::=
                                            SEQUENCE (SIZE (1..maxNrOfCellSyncBursts)) OF SynchronisationReportCharactThreInfoItem -- Mandatory
for 3.84Mcps TDD only. Not Applicable to 1.28Mcps TDD.
SynchronisationReportCharactThreInfoItem ::= SEQUENCE {
    syncFrameNumber
                                SyncFrameNumber,
    cellSyncBurstInformation
                                SEQUENCE (SIZE (1.. maxNrOfReceptsPerSyncFrame)) OF SynchronisationReportCharactCellSyncBurstInfoItem,
                                ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } }
    iE-Extensions
SynchronisationReportCharactThreInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SynchronisationReportCharactCellSyncBurstInfoItem ::= SEQUENCE {
    cellSyncBurstCode
                                    CellSyncBurstCode,
    cellSyncBurstCodeShift
                                    CellSyncBurstCodeShift,
    cellSyncBurstTiming
                                    CellSyncBurstTiming
                                                                    OPTIONAL,
    cellSyncBurstTimingThreshold
                                    CellSyncBurstTimingThreshold
                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs } }
    . . .
SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
SyncDLCodeIdThreInfoLCR ::= SEQUENCE (SIZE (0..maxNrOfSyncFramesLCR)) OF SyncDLCodeIdThreInfoList --Mandatory for 1.28Mcps TDD only. Not
Applicable to 3.84Mcps TDD.
SyncDLCodeIdThreInfoList ::= SEQUENCE {
    syncFrameNoToReceive
                                    SyncFrameNumber,
    syncDLCodeIdInfoLCR
                                    SyncDLCodeInfoListLCR,
    iE-Extensions
                                    ProtocolExtensionContainer { { SyncDLCodeIdThreInfoList-ExtIEs } } 
                                                                                                           OPTIONAL,
```

```
SyncDLCodeIdThreInfoList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeInfoListLCR ::= SEQUENCE (SIZE (1..maxNrOfSyncDLCodesLCR)) OF SyncDLCodeInfoItemLCR
SyncDLCodeInfoItemLCR ::= SEQUENCE {
    syncDLCodeId
                                         SYNCDlCodeId,
                                        CellSyncBurstTimingLCR
    syncDLCodeIdArrivTime
                                                                                  OPTIONAL,
                                        CellSyncBurstTimingThreshold
    syncDLCodeIdTimingThre
                                                                                  OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { SyncDLCodeInfoItem-LCR-ExtIEs } }
                                                                                                                     OPTIONAL,
SyncDLCodeInfoItem-LCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
SynchronisationReportCharacteristicsType ::= ENUMERATED {
    frameRelated,
    sFNperiodRelated,
    cycleLengthRelated,
    thresholdExceeding,
    frequencyAcquisitionCompleted,
SynchronisationReportType ::= ENUMERATED {
    initialPhase,
    steadyStatePhase,
    lateEntrantCell,
    frequencyAcquisition,
-- ------
-- ------
 \texttt{T1} ::= \texttt{ENUMERATED} \  \{ \texttt{v10}, \texttt{v20}, \texttt{v30}, \texttt{v40}, \texttt{v50}, \texttt{v60}, \texttt{v70}, \texttt{v80}, \texttt{v90}, \texttt{v100}, \texttt{v120}, \texttt{v140}, \texttt{v160}, \texttt{v200}, \texttt{v300}, \texttt{v400}, \ldots \} 
T-Cell ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    v4,
    ν5,
    v6,
    v7,
    v8,
```

```
v9
T-RLFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range Os .. 25.5s, Step 0.1s
TDD-AckNack-Power-Offset ::= INTEGER (-7..8,...)
-- Unit dB, Range -7dB .. +8dB, Step 1dB
TDD-ChannelisationCode ::= ENUMERATED {
    chCodeldiv1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7.
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
TDD-ChannelisationCodeLCR ::= SEOUENCE {
    tDD-ChannelisationCode
                                    TDD-ChannelisationCode,
    modulation
                                    Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
                                             ProtocolExtensionContainer { { TDD-ChannelisationCodeLCR-ExtIEs} }
    iE-Extensions
                                                                                                                      OPTIONAL,
TDD-ChannelisationCodeLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem
TDD-DL-Code-InformationItem ::= SEQUENCE {
                                            DPCH-ID.
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
                                            ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-LCR-Information ::= SEOUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-DL-Code-LCR-InformationItem
TDD-DL-Code-LCR-InformationItem ::= SEOUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    tdd-DL-DPCH-TimeSlotFormat-LCR
                                            TDD-DL-DPCH-TimeSlotFormat-LCR,
    iE-Extensions
                                            ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs} }
                                                                                                                           OPTIONAL.
TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
                               QPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
                                EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
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-sizel.
    step-size2,
    step-size3,
    . . .
TDD-TPC-UplinkStepSize-LCR ::= ENUMERATED {
    step-sizel,
```

```
step-size2,
   step-size3,
TransportFormatCombination-Beta ::= CHOICE {
   signalledGainFactors
                              SEQUENCE {
       gainFactor
                                  CHOICE {
           fdd
                                      SEQUENCE
               betaC
                                          BetaCD,
               betaD
                                          BetaCD,
                                  ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } }
               iE-Extensions
                                                                                            OPTIONAL,
           tdd
                                      BetaCD,
       refTFCNumber
                                  RefTFCNumber
                                                  OPTIONAL,
       iE-Extensions
                              ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } }
                                                                                              OPTIONAL,
   computedGainFactors
                                  RefTFCNumber,
GainFactorFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
SignalledGainFactors-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
TDD-UL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem
TDD-UL-Code-InformationItem ::= SEQUENCE {
   dPCH-ID
                                          DPCH-ID,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   iE-Extensions
                                          OPTIONAL,
    . . .
TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem
TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
   dPCH-ID
                                          DPCH-ID,
   tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
   tdd-UL-DPCH-TimeSlotFormat-LCR
                                          TDD-UL-DPCH-TimeSlotFormat-LCR,
   iE-Extensions
                                          ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs} }
                                                                                                                     OPTIONAL,
    . . .
```

```
TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
                                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 ::= SEQUENCE {
    tFCI-SignallingOption
                                TFCI-SignallingMode-TFCI-SignallingOption,
    splitType
                           TFCI-SignallingMode-SplitType
                                                                         OPTIONAL,
    -- This IE shall be present if the TFCI signalling option is set to "split" --
    lengthOfTFCI2
                                TFCI-SignallingMode-LengthOfTFCI2
                                ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} }
    iE-Extensions
                                                                                                   OPTIONAL,
TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCI-SignallingMode-LengthOfTFCI2 ::= INTEGER (1..10)
TFCI-SignallingMode-SplitType ::= ENUMERATED {
    hard.
    logical
TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    split
```

```
TFCI2-BearerInformationResponse ::= SEQUENCE {
    bindingID
                                                    BindingID,
    transportLayerAddress
                                                    TransportLayerAddress,
    iE-Extensions
                                                    ProtocolExtensionContainer { { TFCI2-BearerInformationResponse-ExtIEs} }
                                                                                                                                OPTIONAL,
TFCI2-BearerInformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCI2BearerRequestIndicator ::= ENUMERATED {newBearerRequested}
TGD
                    ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence
                    ::= INTEGER (0..511)
TGPRC
-- 0 = infinity
                    ::= INTEGER (1.. maxTGPS)
TGPSID
TGSN
                    ::= INTEGER (0..14)
TimeSlot ::= INTEGER (0..14)
TimeSlotDirection ::= ENUMERATED {
    ul,
    dl,
    . . .
TimeSlotLCR ::= INTEGER (0..6)
TimeSlotStatus ::= ENUMERATED {
    active,
    not-active,
TimingAdjustmentValue ::= CHOICE {
    initialPhase
                        INTEGER (0..1048575,...),
    steadyStatePhase
                      INTEGER (0..255,...)
TimingAdjustmentValueLCR ::= CHOICE {
    initialPhase
                        INTEGER (0..524287,...),
    steadyStatePhase INTEGER (0..127,...)
TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
```

```
TnlQos ::= CHOICE {
    dsField
                           DsField.
    genericTrafficCategory GenericTrafficCategory,
ToAWE ::= INTEGER (0..2559)
-- Unit ms
ToAWS ::= INTEGER (0..1279)
-- Unit ms
Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
    SEQUENCE {
        tGPSID
                        TGPSID,
        t.GSN
                        TGSN,
        tGL1
                        GapLength,
        tGL2
                        GapLength
                                   OPTIONAL,
        tGD
                        TGD,
        t.GPL1
                        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
            -- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
       uplink-Compressed-Mode-Method
                                           Uplink-Compressed-Mode-Method
                                                                                OPTIONAL.
           -- This IE shall be present if the UL/DL mode IE is set to "UL only" or "UL/DL"
       dL-FrameType
                           DL-FrameType,
        delta-SIR1
                           DeltaSIR,
        delta-SIR-after1 DeltaSIR,
        delta-SIR2
                           DeltaSIR
                                        OPTIONAL,
        delta-SIR-after2 DeltaSIR
                                       OPTIONAL,
       iE-Extensions
                                ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
code-change,
nocode-change
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue-Item
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue-Item ::= SEQUENCE{
                                            CellPortionID,
    transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-
SCCHTransmissionValue,
    iE-Extensions
                                            ProtocolExtensionContainer { { TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-
SCCHTransmissionCellPortionValue-Item-ExtIEs} }
                                                    OPTIONAL,
```

```
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue ::= INTEGER(0..100)
-- According to mapping in [22] and [23]
Transmitted-Carrier-Power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Transmitted-Carrier-Power-For-CellPortion-
Value-Item
Transmitted-Carrier-Power-For-CellPortion-Value-Item ::= SEQUENCE{
    cellPortionID
                                            CellPortionID.
    transmitted-Carrier-Power-Value
                                            Transmitted-Carrier-Power-Value,
                                            ProtocolExtensionContainer { { Transmitted-Carrier-Power-For-CellPortion-Value-Item-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
Transmitted-Carrier-Power-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [22]/[23]
Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [22]/[23]. Values 0 to 9 and 123 to 127 shall not be used.
Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)
TransmissionDiversityApplied ::= BOOLEAN
-- true: applied, false: not applied
TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
TFCS ::= SEQUENCE {
    tFCSvalues
                                CHOICE {
       no-Split-in-TFCI
                                    TFCS-TFCSList,
                                    SEOUENCE {
        split-in-TFCI
           transportFormatCombination-DCH
                                                TFCS-DCHList,
            signallingMethod
                                                CHOICE {
                tFCI-Range
                                                TFCS-MapingOnDSCHList,
                explicit
                                                    TFCS-DSCHList,
                . . .
                                                ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } }
           iE-Extensions
```

```
iE-Extensions
                       ProtocolExtensionContainer { { TFCS-ExtIEs} }
                                                                          OPTIONAL.
Split-in-TFCI-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    SEQUENCE {
                           TFCS-CTFC,
       cTFC
       tFC-Beta
                    TransportFormatCombination-Beta
                                                        OPTIONAL,
       -- The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD - or PCPCH channel].
       iE-Extensions ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs} }
        . . .
TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-CTFC ::= CHOICE {
    ctfc2bit
                                       INTEGER (0..3),
    ctfc4bit
                                       INTEGER (0..15),
    ctfc6bit
                                       INTEGER (0..63),
    ctfc8bit
                                       INTEGER (0..255),
    ctfc12bit
                                       INTEGER (0..4095),
    ctfc16bit
                                       INTEGER (0..65535),
    ctfcmaxbit
                                       INTEGER (0..maxCTFC)
TFCS-DCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI1Combs)) OF
    SEQUENCE {
       cTFC
                           TFCS-CTFC,
                           ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs} }
       iE-Extensions
                                                                                       OPTIONAL,
TFCS-DCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-MapingOnDSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
    SEQUENCE {
       maxTFCI-field2-Value
                                   TFCS-MaxTFCI-field2-Value,
       cTFC-DSCH
                               TFCS-CTFC,
       iE-Extensions
                                   ProtocolExtensionContainer { { TFCS-MapingOnDSCHList-ExtIEs} } OPTIONAL,
    . . .
```

```
TFCS-MapingOnDSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxNrOfTFCI2Combs-1)
TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
   SEQUENCE {
       cTFC-DSCH
                              TFCS-CTFC,
                                  ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs} }
       iE-Extensions
                                                                                            OPTIONAL,
TFCS-DSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportBearerRequestIndicator ::= ENUMERATED {
   bearerRequested,
   bearerNotRequested,
TransportFormatSet ::= SEQUENCE {
   dynamicParts
                          TransportFormatSet-DynamicPartList,
    semi-staticPart
                          TransportFormatSet-Semi-staticPart,
                          ProtocolExtensionContainer { { TransportFormatSet-ExtIEs} }
   iE-Extensions
                                                                                            OPTIONAL,
TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
   SEQUENCE {
       nrOfTransportBlocks
                                  TransportFormatSet-NrOfTransportBlocks,
       transportBlockSize
                                  TransportFormatSet-TransportBlockSize
                                                                            OPTIONAL,
       -- This IE shall be present if the Number of Transport Blocks IE is set to a value greater than 0
       mode
                                  TransportFormatSet-ModeDP,
                                  iE-Extensions
                                                                                                              OPTIONAL,
TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
    transmissionTimeIntervalInformation
                                          TransmissionTimeIntervalInformation
    -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to 'dynamic'
   iE-Extensions
                                          ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
```

```
TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
    SEOUENCE {
       transmissionTimeInterval
                                        TransportFormatSet-TransmissionTimeIntervalDynamic,
    iE-Extensions
                                        ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs} }
                                                                                                                           OPTIONAL,
    . . .
TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-Semi-staticPart ::= SEQUENCE {
                                        TransportFormatSet-TransmissionTimeIntervalSemiStatic,
    transmissionTimeInterval
    channelCoding
                                    TransportFormatSet-ChannelCodingType,
    codingRate
                                    TransportFormatSet-CodingRate
                                                                                 OPTIONAL,
    -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
    rateMatchingAttribute
                                    TransportFormatSet-RateMatchingAttribute,
    cRC-Size
                                    TransportFormatSet-CRC-Size,
    mode
                                    TransportFormatSet-ModeSSP
                                    ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs} }
    iE-Extensions
                                                                                                                     OPTIONAL,
TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
TransportFormatSet-CodingRate ::= ENUMERATED {
   half,
    third,
    . . .
TransportFormatSet-CRC-Size ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24,
    . . .
```

```
TransportFormatSet-ModeDP ::= CHOICE
                       TDD-TransportFormatSet-ModeDP,
    notApplicable
                                NULL,
TransportFormatSet-ModeSSP ::= CHOICE {
                    TransportFormatSet-SecondInterleavingMode,
    notApplicable
                                NULL,
    . . .
TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)
TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)
TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeSlot-related,
    . . .
TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
   msec-10,
   msec-20,
    msec-40,
    msec-80,
TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
   msec-10,
   msec-20,
   msec-40,
   msec-80,
    dynamic,
    msec-5
TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)
TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))
TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
TUTRANGPS ::= SEQUENCE {
    ms-part
                INTEGER (0..16383),
    ls-part
                INTEGER (0..4294967295)
```

```
TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s
TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s
TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE
    tUTRANGPSChangeLimit
                                         TUTRANGPSChangeLimit
                                                                                OPTIONAL,
    predictedTUTRANGPSDeviationLimit
                                         PredictedTUTRANGPSDeviationLimit
                                                                                OPTIONAL,
                                  ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
TUTRANGPSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
       tUTRANGPS
                                      TUTRANGPS,
       tUTRANGPSQuality
                                      TUTRANGPSQuality
                                                                     OPTIONAL,
       tUTRANGPSDriftRate
                                      TUTRANGPSDriftRate,
       tUTRANGPSDriftRateQuality
                                      TUTRANGPSDriftRateQuality
                                                                     OPTIONAL,
                                      ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} }
       iE-Extensions
                                                                                                                       OPTIONAL,
TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
TypeOfError ::= ENUMERATED {
   not-understood,
   missing,
-- ------
-- ------
```

```
UARFCN ::= INTEGER (0..16383, ...)
-- corresponds to OMHz .. 3276.6MHz
UC-Id ::= SEOUENCE {
    rNC-ID
                        RNC-ID,
    c-ID
                        C-ID,
                            ProtocolExtensionContainer { {UC-Id-ExtIEs} } OPTIONAL,
    iE-Extensions
UC-Id-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UDRE ::= ENUMERATED {
    udre-minusequal-one-m,
    udre-betweenoneandfour-m,
    udre-betweenfourandeight-m,
    udre-greaterequaleight-m
UE-Capability-Information ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
    iE-Extensions
                                        ProtocolExtensionContainer { { UE-Capability-Information-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
UE-Capability-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UE-E-DCH-Capability-Information ::= SEQUENCE {
    e-DCH-Physical-Layer-Category
                                                E-DCH-Physical-Layer-Category,
    iE-Extensions
                                                ProtocolExtensionContainer { { UE-E-DCH-Capability-Information-ExtIEs } }
                                                                                                                                 OPTIONAL,
UE-E-DCH-Capability-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CapacityCredit ::= INTEGER (0..65535)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
UL-DPDCH-Indicator-For-E-DCH-Operation ::= ENUMERATED {
    ul-DPDCH-present,
    ul-DPDCH-not-present
```

```
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    higher-layer-scheduling,
UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem
UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-InformationList
                                            TDD-UL-Code-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationItem-ExtIEs} }
UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeslotLCR-InformationItem
UL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
                                            TFCI-Presence,
    tFCI-Presence
    uL-Code-InformationList
                                            TDD-UL-Code-LCR-Information,
                                            ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
    . . .
UL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)
UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]
UL-FP-Mode ::= ENUMERATED {
    normal,
    silent,
UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
UL-ScramblingCode ::= SEQUENCE {
```

```
uL-ScramblingCodeNumber
                                    UL-ScramblingCodeNumber,
    uL-ScramblingCodeLength
                                    UL-ScramblingCodeLength,
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } }
UL-ScramblingCode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-ScramblingCodeNumber ::= INTEGER (0..16777215)
UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
UL-Synchronisation-Parameters-LCR ::= SEQUENCE
    uL-Synchronisation-StepSize
                                        UL-Synchronisation-StepSize,
    uL-Synchronisation-Frequency
                                        UL-Synchronisation-Frequency,
    iE-Extensions
                                        ProtocolExtensionContainer { { UL-Synchronisation-Parameters-LCR-ExtIEs } }
                                                                                                                       OPTIONAL,
UL-Synchronisation-Parameters-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Synchronisation-StepSize ::= INTEGER (1..8)
UL-Synchronisation-Frequency ::= INTEGER (1..8)
UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem
UL-TimeSlot-ISCP-InfoItem ::= SEOUENCE {
    timeSlot
                                    TimeSlot,
    iSCP
                                    UL-TimeslotISCP-Value,
                                    ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs} }
    iE-Extensions
                                                                                                           OPTIONAL,
UL-TimeSlot-ISCP-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeSlot-ISCP-LCR-InfoItem
UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    iSCP
                                    UL-TimeslotISCP-Value,
                                    ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs} }
    iE-Extensions
                                                                                                              OPTIONAL,
    . . .
```

```
UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UpPTSInterferenceValue ::= INTEGER (0..127,...)
Unidirectional-DCH-Indicator
                             ::= ENUMERATED {
   downlink-DCH-only,
   uplink-DCH-only
USCH-Information ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem
USCH-InformationItem ::= SEQUENCE {
   uSCH-ID
                                         USCH-ID,
   cCTrCH-ID
                                         CCTrCH-ID,
                                                           -- UL CCTrCH in which the USCH is mapped
   transportFormatSet
                                         TransportFormatSet, -- For USCH
   allocationRetentionPriority
                                         AllocationRetentionPriority,
                                         ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                      OPTIONAL,
USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-bindingID
                                         CRITICALITY ignore
                                                               EXTENSION
                                                                          BindingID
                                                                                           PRESENCE
                                                                                                      optional }|
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                         CRITICALITY ignore
                                                                          TransportLayerAddress PRESENCE
                                                                                                           optional }
                                                               EXTENSION
    -- Shall be ignored if bearer establishment with ALCAP.
{ ID id-TnlOos
                                     CRITICALITY ignore
                                                            EXTENSION Thloos PRESENCE optional
    . . .
USCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationResponseItem
USCH-InformationResponseItem ::= SEQUENCE {
   uSCH-ID
                                             USCH-ID,
   bindingID
                                             BindingID
                                                                   OPTIONAL,
   transportLayerAddress
                                             TransportLayerAddress OPTIONAL,
   iE-Extensions
                                             OPTIONAL,
USCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotISCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
UL-TimeslotISCP-Value-IncrDecrThres ::= INTEGER (0..126)
USCH-ID ::= INTEGER (0..255)
```

```
__ ______
-- -----
-- -----
-- -----
__ _____
-- -----
-- -----
-- -----
END
9.3.5 Common Definitions
__ ********************
-- Common definitions
__ ********************************
NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-CommonDataTypes (3) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
__ ********************
-- Extension constants
__ *********************
maxPrivateIEs
                 INTEGER ::= 65535
maxProtocolExtensions
                 INTEGER ::= 65535
                 INTEGER ::= 65535
maxProtocolIEs
__ *******************
-- Common Data Types
__ *******************
Criticality
        ::= ENUMERATED { reject, ignore, notify }
MessageDiscriminator ::= ENUMERATED { common, dedicated }
```

```
Presence
              ::= ENUMERATED { optional, conditional, mandatory }
PrivateIE-ID ::= CHOICE {
   local
              INTEGER (0..maxPrivateIEs),
   qlobal
                  OBJECT IDENTIFIER
ProcedureCode ::= INTEGER (0..255)
ProcedureID
            ::= SEQUENCE {
   procedureCode
                        ProcedureCode,
                         ENUMERATED { tdd, fdd, common, ... }
   ddMode
ProtocolIE-ID
             ::= INTEGER (0..maxProtocolIEs)
TransactionID
              ::= CHOICE {
   shortTransActionId INTEGER (0..127),
   longTransActionId
                        INTEGER (0..32767)
TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessfull-outcome, outcome }
END
9.3.6 Constant Definitions
-- Constant definitions
__ ********************
NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
   ProcedureCode,
   ProtocolIE-ID
FROM NBAP-CommonDataTypes;
__ **********************
-- Elementary Procedures
id-audit
                                                  ProcedureCode ::= 0
id-auditRequired
                                                  ProcedureCode ::= 1
```

id-blockResource	ProcedureCode		
id-cellDeletion	ProcedureCode		
id-cellReconfiguration	ProcedureCode		
id-cellSetup	ProcedureCode		
id-cellSynchronisationInitiation	ProcedureCode	::=	45
id-cellSynchronisationReconfiguration	ProcedureCode	::=	46
id-cellSynchronisationReporting	ProcedureCode	::=	47
id-cellSynchronisationTermination	ProcedureCode	::=	48
id-cellSynchronisationFailure	ProcedureCode	::=	49
id-commonMeasurementFailure	ProcedureCode	::=	6
id-commonMeasurementInitiation	ProcedureCode	::=	7
id-commonMeasurementReport	ProcedureCode	::=	8
id-commonMeasurementTermination	ProcedureCode	::=	9
id-commonTransportChannelDelete	ProcedureCode	::=	10
id-commonTransportChannelReconfigure	ProcedureCode		
id-commonTransportChannelSetup	ProcedureCode	::=	12
id-compressedModeCommand	ProcedureCode		
id-dedicatedMeasurementFailure	ProcedureCode	::=	16
id-dedicatedMeasurementInitiation	ProcedureCode		
id-dedicatedMeasurementReport	ProcedureCode	::=	18
id-dedicatedMeasurementTermination	ProcedureCode		
id-downlinkPowerControl	ProcedureCode		
id-downlinkPowerTimeslotControl	ProcedureCode		
id-errorIndicationForCommon	ProcedureCode		
id-errorIndicationForDedicated	ProcedureCode		
id-informationExchangeFailure	ProcedureCode		
id-informationExchangeInitiation	ProcedureCode		
id-informationExchangeTermination	ProcedureCode		
id-informationReporting	ProcedureCode		
id-BearerRearrangement	ProcedureCode		
id-mBMSNotificationUpdate	ProcedureCode		
id-physicalSharedChannelReconfiguration	ProcedureCode		
id-privateMessageForCommon	ProcedureCode		
id-privateMessageForDedicated	ProcedureCode		
id-radioLinkAddition	ProcedureCode		
id-radioLinkDeletion	ProcedureCode		
id-radioLinkFailure	ProcedureCode		
id-radioLinkPreemption	ProcedureCode		
id-radioLinkRestoration	ProcedureCode		
id-radioLinkSetup	ProcedureCode		
id-reset	ProcedureCode		
id-resourceStatusIndication	ProcedureCode		
id-cellSynchronisationAdjustment	ProcedureCode		
id-synchronisedRadioLinkReconfigurationCancellation	ProcedureCode		
id-synchronisedRadioLinkReconfigurationCommit	ProcedureCode		
id-synchronisedRadioLinkReconfigurationPreparation	ProcedureCode		
id-systemInformationUpdate	ProcedureCode		
id-unblockResource	ProcedureCode		
id-unSynchronisedRadioLinkReconfiguration	ProcedureCode		
id-radioLinkActivation	ProcedureCode		
id-radioLinkParameterUpdate	ProcedureCode	::=	52

```
-- Lists
__ **********************
maxNrOfCodes
                            INTEGER ::= 10
maxNrOfDLTSs
                            INTEGER ::= 15
maxNrOfDLTSLCRs
                            INTEGER ::= 6
maxNrOfErrors
                           INTEGER ::= 256
maxNrOfTFs
                            INTEGER ::= 32
                            INTEGER ::= 1024
maxNrOfTFCs
maxNrOfRLs
                           INTEGER ::= 16
maxNrOfRLs-1
                           INTEGER ::= 15 -- maxNrOfRLs - 1
                           INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLs-2
maxNrOfRLSets
                            INTEGER ::= maxNrOfRLs
                           INTEGER ::= 240
maxNrOfDPCHs
maxNrOfDPCHLCRs
                            INTEGER ::= 240
                            INTEGER ::= 8
maxNrOfSCCPCHs
maxNrOfSCCPCHsinExt
                            INTEGER ::= 232
maxNrOfCPCHs
                            INTEGER ::= 16
maxNrOfPCPCHs
                            INTEGER ::= 64
maxNrOfDCHs
                            INTEGER ::= 128
maxNrOfDSCHs
                            INTEGER ::= 32
maxNrOfFACHs
                            INTEGER ::= 8
maxNrOfCCTrCHs
                            INTEGER ::= 16
maxNrOfPDSCHs
                            INTEGER ::= 256
maxNrOfHSPDSCHs
                            INTEGER ::= 16
                            INTEGER ::= 256
maxNrOfPUSCHs
maxNrOfPDSCHSets
                            INTEGER ::= 256
maxNrOfPRACHLCRs
                            INTEGER ::= 8
maxNrOfPUSCHSets
                            INTEGER ::= 256
maxNrOfSCCPCHLCRs
                            INTEGER ::= 8
maxNrOfSCCPCHsLCRinExt
                            INTEGER ::= 88
maxNrOfULTSs
                            INTEGER ::= 15
maxNrOfULTSLCRs
                            INTEGER ::= 6
maxNrOfUSCHs
                            INTEGER ::= 32
maxAPSiqNum
                           INTEGER ::= 16
                           INTEGER ::= 8
maxNrOfSlotFormatsPRACH
maxCellinNodeB
                            INTEGER ::= 256
maxCCPinNodeB
                            INTEGER ::= 256
maxCPCHCell
                            INTEGER ::= maxNrOfCPCHs
maxCTFC
                            INTEGER ::= 16777215
maxLocalCellinNodeB
                            INTEGER ::= maxCellinNodeB
                            INTEGER ::= 7
maxNoofLen
maxFPACHCell
                            INTEGER ::= 8
                            INTEGER ::= maxPRACHCell
maxRACHCell
maxPRACHCell
                            INTEGER ::= 16
maxPCPCHCell
                            INTEGER ::= 64
                            INTEGER ::= 32
maxSCCPCHCell
maxSCCPCHCellinExt
                            INTEGER ::= 208 -- maxNrOfSCCPCHs + maxNrOfSCCPCHsinExt - maxSCCPCHCell
                            INTEGER ::= 64 -- maxNrOfSCCPCHLCRs + maxNrOfSCCPCHsLCRinExt - maxSCCPCHCell
maxSCCPCHCellinExtLCR
maxSCPICHCell
                            INTEGER ::= 32
maxTTI-count
                            INTEGER ::= 4
maxIBSEG
                            INTEGER ::= 16
maxIB
                            INTEGER ::= 64
```

```
INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxFACHCell
maxRateMatching
                           INTEGER ::= 256
maxCodeNrComp-1
                           INTEGER ::= 256
maxHS-PDSCHCodeNrComp-1
                           INTEGER ::= 15
maxHS-SCCHCodeNrComp-1
                           INTEGER ::= 127
maxNrOfCellSyncBursts
                           INTEGER ::= 10
maxNrOfCodeGroups
                           INTEGER ::= 256
maxNrOfReceptsPerSvncFrame
                           INTEGER ::= 16
maxNrOfMeasNCell
                           INTEGER ::= 96
maxNrOfMeasNCell-1
                           INTEGER ::= 95
                                           -- maxNrOfMeasNCell - 1
maxNrOfTFCIGroups
                           INTEGER ::= 256
maxNrOfTFCI1Combs
                           INTEGER ::= 512
maxNrOfTFCI2Combs
                           INTEGER ::= 1024
maxNrOfTFCI2Combs-1
                           INTEGER ::= 1023
maxNrOfSF
                           INTEGER ::= 8
maxTGPS
                           INTEGER ::= 6
maxCommunicationContext
                           INTEGER ::= 1048575
maxNrOfLevels
                           INTEGER ::= 256
maxNoSat
                           INTEGER ::= 16
                           INTEGER ::= 8
maxNoGPSItems
maxNrOfHSSCCHs
                           INTEGER ::= 32
maxNrOfHSSICHs
                           INTEGER ::= 4
maxNrOfSyncFramesLCR
                           INTEGER ::= 512
maxNrOfReceptionsperSvncFrameLCR
                                   INTEGER ::= 8
maxNrOfSyncDLCodesLCR
                           INTEGER ::= 32
maxNrOfHSSCCHCodes
                               INTEGER ::= 4
maxNrOfMACdFlows
                               INTEGER ::= 8
                               INTEGER ::= 7
maxNrOfMACdFlows-1
                                               -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUIndexes
                               INTEGER ::= 8
maxNrOfMACdPDUIndexes-1
                               INTEGER ::= 7
                                             -- maxNoOfMACdPDUIndexes - 1
maxNrOfNIs
                               INTEGER ::= 256
maxNrOfPriorityOueues
                               INTEGER ::= 8
                               INTEGER ::= 7
                                               -- maxNoOfPriorityOueues - 1
maxNrOfPriorityOueues-1
maxNrOfHAROProcesses
                               INTEGER ::= 8
maxNrOfContextsOnUeList
                               INTEGER ::= 16
maxNrOfCellPortionsPerCell
                               INTEGER ::= 64
maxNrOfCellPortionsPerCell-1
                               INTEGER ::= 63
maxNrOfPriorityClasses
                               INTEGER ::= 16
maxNrOfSatAlmanac-maxNoSat
                               INTEGER ::= 16 -- maxNrofSatAlmanac - maxNoSat
maxE-AGCH-CodeNrComp-1
                               INTEGER ::= 1
                                              -- FFS
maxE-RGCH-E-HICH-CodeNrComp-1
                               INTEGER ::= 1
                                               -- FFS
maxNrOfDDIs
                               INTEGER ::= 1
                                               -- FFS
maxNrOfE-AGCHs
                               INTEGER ::= 1
                                               -- FFS
maxNrOfEDCHMACdFlows
                               INTEGER ::= 8
                                              -- FFS
maxNrOfEDCHMACdFlows-1
                               INTEGER ::= 7 -- FFS
maxNrOfE-RGCHs-E-HICHs
                               INTEGER ::= 1
                                               -- FFS
maxNrofSigSegRGHI-1
                               INTEGER ::= 39
-- TES
*******************
```

id-AICH-Information	ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 1
id-BCH-Information	ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 8
id-BCCH-ModificationTime	ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator	ProtocolIE-ID ::= 10
id-Cause	ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp	ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp	ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 19
id-CellParameterID	ProtocolIE-ID ::= 23
id-CFN	ProtocolIE-ID ::= 24
id-C-ID	ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 33
id-CommonMeasurementType	ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID	ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 37
id-CommunicationControlPortID	ProtocolIE-ID ::= 40
id-ConfigurationGenerationID id-CRNC-CommunicationContextID	ProtocolIE-ID ::= 43 ProtocolIE-ID ::= 44
id-CriticalityDiagnostics	ProtocoliE-ID ::= 44 ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocoliE-ID ::= 45 ProtocoliE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocoliE-ID ::= 46 ProtocoliE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocoliE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocoliE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocoliE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 135
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83

id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161

id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRgst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRgstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRgstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocoliE-ID ::= 214
id-RL-InformationList-RL-ReconfrqstFDD	ProtocoliE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocoliE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocoliE-ID ::= 217
-	ProtocoliE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocoliE-ID ::= 218 ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-ReconfRsp	
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225

id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-SignallingBearerRequestIndicator	ProtocolIE-ID ::= 138
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TargetCommunicationControlPortID	ProtocolIE-ID ::= 139
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302

id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-USCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 141
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailure	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
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id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TFCI2BearerRequestIndicator	ProtocolIE-ID ::= 142
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-Timeslot SCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
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id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RgstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRgst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRgst	ProtocolIE-ID ::= 487
id-PDSCH-Information-Cell-SetupRgstFDD	ProtocolIE-ID ::= 26
id-PDSCH-Information-Cell-ReconfRgstFDD	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
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id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd	ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID	ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNSFNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNSFNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= 102
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 103
id-transportlayeraddress	ProtocolIE-ID ::= 104
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRgstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
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id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD
                                                                    ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRastTDD
                                                                    ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD
                                                                    ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR
                                                                    ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD
                                                                    ProtocolIE-ID ::= 550
id-DwPCH-Power
                                                                    ProtocolIE-ID ::= 551
id-AccumulatedClockupdate-CellSvncReprtTDD
                                                                    ProtocolIE-ID ::= 552
id-Angle-Of-Arrival-Value-LCR
                                                                    ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information
                                                                    ProtocolTE-TD ::= 530
id-HSDSCH-FDD-Information-Response
                                                                    ProtocolIE-ID ::= 531
id-HSDSCH-Information-to-Modify
                                                                    ProtocolIE-ID ::= 534
id-HSDSCH-RNTI
                                                                    ProtocolIE-ID ::= 535
id-HSDSCH-TDD-Information
                                                                    ProtocolIE-ID ::= 536
id-HSDSCH-TDD-Information-Response
                                                                    ProtocolIE-ID ::= 537
id-HSPDSCH-RL-ID
                                                                    ProtocolIE-ID ::= 541
id-PrimCCPCH-RSCP-DL-PC-RgstTDD
                                                                    ProtocolIE-ID ::= 542
                                                                    ProtocolIE-ID ::= 64
id-Oth-Parameter
id-PDSCH-RL-ID
                                                                    ProtocolIE-ID ::= 66
id-HSDSCH-RearrangeList-Bearer-RearrangeInd
                                                                    ProtocolIE-ID ::= 553
id-UL-Synchronisation-Parameters-LCR
                                                                    ProtocolIE-ID ::= 554
id-HSDSCH-FDD-Update-Information
                                                                    ProtocolTE-ID ::= 555
id-HSDSCH-TDD-Update-Information
                                                                    ProtocolIE-ID ::= 556
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 558
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 559
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD
                                                                    ProtocolIE-ID ::= 560
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRgstTDD
                                                                    ProtocolIE-ID ::= 561
id-TDD-TPC-DownlinkStepSize-RL-AdditionRgstTDD
                                                                    ProtocolIE-ID ::= 562
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 563
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 564
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 565
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD
                                                                ProtocolIE-ID ::= 566
id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD
                                                                    ProtocolIE-ID ::= 567
id-CCTrCH-Minimum-DL-Power-RL-SetupRgstTDD
                                                                    ProtocolIE-ID ::= 568
id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD
                                                                    ProtocolIE-ID ::= 569
id-CCTrCH-Minimum-DL-Power-RL-AdditionRgstTDD
                                                                    ProtocolIE-ID ::= 570
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 571
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 572
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 573
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 574
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 575
id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 576
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
                                                                    ProtocolIE-ID ::= 577
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD
                                                                    ProtocolIE-ID ::= 578
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD
                                                                    ProtocolTE-TD ::= 579
id-Initial-DL-Power-TimeslotLCR-InformationItem
                                                                    ProtocolIE-ID ::= 580
id-Maximum-DL-Power-TimeslotLCR-InformationItem
                                                                    ProtocolIE-ID ::= 581
id-Minimum-DL-Power-TimeslotLCR-InformationItem
                                                                    ProtocolIE-ID ::= 582
id-HS-DSCHProvidedBitRateValueInformation
                                                                    ProtocolIE-ID ::= 583
id-HS-DSCHRequiredPowerValueInformation
                                                                    ProtocolIE-ID ::= 585
id-HS-DSCHRequiredPowerValue
                                                                    ProtocolIE-ID ::= 586
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission ProtocolIE-ID ::= 587
id-HS-SICH-Reception-Ouality
                                                                    ProtocolIE-ID ::= 588
id-HS-SICH-Reception-Quality-Measurement-Value
                                                                    ProtocolIE-ID ::= 589
id-HSSICH-Info-DM-Rprt
                                                                    ProtocolIE-ID ::= 590
```

```
id-HSSICH-Info-DM-Rqst
                                                                    ProtocolIE-ID ::= 591
id-HSSICH-Info-DM-Rsp
                                                                    ProtocolIE-ID ::= 592
id-Best-Cell-Portions-Value
                                                                    ProtocolIE-ID ::= 593
id-Primary-CPICH-Usage-for-Channel-Estimation
                                                                    ProtocolIE-ID ::= 594
id-Secondary-CPICH-Information-Change
                                                                    ProtocolIE-ID ::= 595
id-NumberOfReportedCellPortions
                                                                    ProtocolIE-ID ::= 596
id-CellPortion-InformationItem-Cell-SetupRgstFDD
                                                                    ProtocolIE-ID ::= 597
id-CellPortion-InformationList-Cell-SetupRgstFDD
                                                                    ProtocolIE-ID ::= 598
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD
                                                                    ProtocolTE-TD ::= 599
id-Secondary-CPICH-Information
                                                                    ProtocolIE-ID ::= 600
id-Received-total-wide-band-power-For-CellPortion
                                                                    ProtocolIE-ID ::= 601
id-Unidirectional-DCH-Indicator
                                                                    ProtocolIE-ID ::= 602
id-TimingAdjustmentValueLCR
                                                                    ProtocolIE-ID ::= 603
id-multipleRL-dl-DPCH-InformationList
                                                                    ProtocolIE-ID ::= 604
id-multipleRL-dl-DPCH-InformationModifyList
                                                                    ProtocolIE-ID ::= 605
id-multipleRL-ul-DPCH-InformationList
                                                                    ProtocolIE-ID ::= 606
id-multipleRL-ul-DPCH-InformationModifyList
                                                                    ProtocolIE-ID ::= 607
                                                                    ProtocolIE-ID ::= 608
id-RL-ID
id-SAT-Info-Almanac-ExtItem
                                                                    ProtocolIE-ID ::= 609
id-HSDPA-Capability
                                                                    ProtocolIE-ID ::= 610
id-HSDSCH-Resources-Information-AuditRsp
                                                                    ProtocolTE-ID ::= 611
id-HSDSCH-Resources-Information-ResourceStatusInd
                                                                    ProtocolIE-ID ::= 612
id-HSDSCH-MACdFlows-to-Add
                                                                    ProtocolTE-ID ::= 613
id-HSDSCH-MACdFlows-to-Delete
                                                                    ProtocolIE-ID ::= 614
id-HSDSCH-Information-to-Modify-Unsynchronised
                                                                    ProtocolIE-ID ::= 615
id-TnlOos
                                                                    ProtocolIE-ID ::= 616
id-Received-total-wide-band-power-For-CellPortion-Value
                                                                    ProtocolIE-ID ::= 617
id-Transmitted-Carrier-Power-For-CellPortion
                                                                    ProtocolIE-ID ::= 618
id-Transmitted-Carrier-Power-For-CellPortion-Value
                                                                    ProtocolIE-ID ::= 619
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion
                                                                                            ProtocolIE-ID ::= 620
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue ProtocolIE-ID ::= 621
id-UpPTSInterferenceValue
                                                                    ProtocolIE-ID ::= 622
id-PrimaryCCPCH-RSCP-Delta
                                                                    ProtocolIE-ID ::= 623
id-MeasurementRecoveryBehavior
                                                                    ProtocolIE-ID ::= 624
id-MeasurementRecoveryReportingIndicator
                                                                    ProtocolIE-ID ::= 625
id-MeasurementRecovervSupportIndicator
                                                                    ProtocolIE-ID ::= 626
id-Tstd-indicator
                                                                    ProtocolIE-ID ::= 627
id-multiple-RL-Information-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 628
id-multiple-RL-Information-RL-ReconfRgstTDD
                                                                    ProtocolIE-ID ::= 629
id-DL-DPCH-Power-Information-RL-ReconfPrepFDD
                                                                    ProtocolIE-ID ::= 630
id-F-DPCH-Information-RL-ReconfPrepFDD
                                                                    ProtocolIE-ID ::= 631
id-F-DPCH-Information-RL-SetupRqstFDD
                                                                    ProtocolIE-ID ::= 632
id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD
                                                                    ProtocolIE-ID ::= 633
id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD
                                                                    ProtocolTE-TD ::= 634
id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRgstTDD
                                                                    ProtocolIE-ID ::= 635
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRgstTDD
                                                                    ProtocolIE-ID ::= 636
                                                                    ProtocolIE-ID ::= 637
id-MICH-CFN
id-MICH-Information-AuditRsp
                                                                    ProtocolIE-ID ::= 638
id-MICH-Information-ResourceStatusInd
                                                                    ProtocolIE-ID ::= 639
id-MICH-Parameters-CTCH-ReconfRqstFDD
                                                                    ProtocolIE-ID ::= 640
id-MICH-Parameters-CTCH-ReconfRqstTDD
                                                                    ProtocolIE-ID ::= 641
id-MICH-Parameters-CTCH-SetupRgstFDD
                                                                    ProtocolIE-ID ::= 642
id-MICH-Parameters-CTCH-SetupRgstTDD
                                                                    ProtocolIE-ID ::= 643
id-Modification-Period
                                                                    ProtocolIE-ID ::= 644
```

```
id-NI-Information-NotifUpdateCmd
                                                                   ProtocolIE-ID ::= 645
id-S-CCPCH-InformationListExt-AuditRsp
                                                                   ProtocolIE-ID ::= 646
id-S-CCPCH-InformationListExt-ResourceStatusInd
                                                                   ProtocolIE-ID ::= 647
id-S-CCPCH-LCR-InformationListExt-AuditRsp
                                                                   ProtocolIE-ID ::= 648
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd
                                                                   ProtocolIE-ID ::= 649
id-HARO-Preamble-Mode
                                                                   ProtocolIE-ID ::= 650
id-Initial-DL-DPCH-TimingAdjustment
                                                                   ProtocolIE-ID ::= 651
id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                                   ProtocolIE-ID ::= 652
id-DLTransmissionBranchLoadValue
                                                                   ProtocolIE-ID ::= 653
id-Power-Local-Cell-Group-choice-CM-Rgst
                                                                   ProtocolIE-ID ::= 654
id-Power-Local-Cell-Group-choice-CM-Rsp
                                                                   ProtocolIE-ID ::= 655
id-Power-Local-Cell-Group-choice-CM-Rprt
                                                                   ProtocolIE-ID ::= 656
id-HSDPA-CellPortion-InformationItem-PSCH-ReconfRgst
                                                                   ProtocolIE-ID ::= 658
id-HSDPA-CellPortion-InformationList-PSCH-ReconfRgst
                                                                   ProtocolIE-ID ::= 659
id-HS-DSCHRequiredPowerValue-For-Cell-Portion
                                                                   ProtocolIE-ID ::= 660
id-HS-DSCHRequiredPowerValueInformation-For-CellPortion
                                                                   ProtocolIE-ID ::= 661
id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion
                                                                   ProtocolIE-ID ::= 662
id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                                   ProtocolIE-ID ::= 663
id-E-AGCH-FDD-Code-Information
                                                                   ProtocolIE-ID ::= 664
id-E-DCH-Capability
                                                                   ProtocolIE-ID ::= 665
id-E-DCH-FDD-DL-Control-Channel-Information
                                                                   ProtocolTE-ID ::= 666
                                                                   ProtocolIE-ID ::= 667
id-E-DCH-FDD-Information
                                                                   ProtocolIE-ID ::= 668
id-E-DCH-FDD-Information-Response
                                                                   ProtocolIE-ID ::= 669
id-E-DCH-FDD-Information-to-Modify
id-E-DCH-MACdFlows-to-Add
                                                                   ProtocolIE-ID ::= 670
id-E-DCH-MACdFlows-to-Delete
                                                                   ProtocolIE-ID ::= 671
id-E-DCH-Resources-Information-AuditRsp
                                                                   ProtocolIE-ID ::= 672
id-E-DCH-Resources-Information-ResourceStatusInd
                                                                   ProtocolIE-ID ::= 673
id-E-DCH-RL-Indication
                                                                   ProtocolIE-ID ::= 674
id-E-DCH-RL-Set-ID
                                                                   ProtocolIE-ID ::= 675
id-E-DPCH-Information-RL-ReconfPrepFDD
                                                                   ProtocolIE-ID ::= 676
id-E-DPCH-Information-RL-SetupRqstFDD
                                                                   ProtocolIE-ID ::= 677
id-E-RGCH-E-HICH-FDD-Code-Information
                                                                   ProtocolIE-ID ::= 678
id-Serving-E-DCH-RL-ID
                                                                   ProtocolIE-ID ::= 679
id-UL-DPDCH-Indicator-For-E-DCH-Operation
                                                                   ProtocolIE-ID ::= 680
id-E-DPCH-Information-RL-ReconfRgstFDD
                                                                   ProtocolIE-ID ::= 682
END
9.3.7 Container Definitions
-- Container definitions
__ *********************
NBAP-Containers
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Containers (5) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
```

```
__ ********************
-- IE parameter types from other modules.
__ *********************
IMPORTS
  maxProtocolExtensions,
  maxPrivateIEs,
  maxProtocolIEs,
  Criticality,
   Presence,
   PrivateIE-ID,
   ProtocolIE-ID
FROM NBAP-CommonDataTypes;
__ ********************
-- Class Definition for Protocol IEs
__ **********************
NBAP-PROTOCOL-IES ::= CLASS {
        ProtocolIE-ID
                           UNIQUE,
   &criticality Criticality,
   &Value,
   &presence Presence
WITH SYNTAX {
  ID &id
   CRITICALITY &criticality
            &Value
   PRESENCE
            &presence
  *****************
-- Class Definition for Protocol IEs
__ ********************
NBAP-PROTOCOL-IES-PAIR ::= CLASS {
            ProtocolIE-ID
                              UNIQUE,
   &firstCriticality Criticality,
   &FirstValue,
   &secondCriticality Criticality,
   &SecondValue,
   &presence
               Presence
WITH SYNTAX {
            &id
  ID
   FIRST CRITICALITY &firstCriticality
   FIRST TYPE
            &FirstValue
   SECOND CRITICALITY &secondCriticality
```

```
SECOND TYPE
              &SecondValue
   PRESENCE
              &presence
  *****************
-- Class Definition for Protocol Extensions
  NBAP-PROTOCOL-EXTENSION ::= CLASS {
        ProtocolIE-ID
                       UNIQUE,
   &criticality Criticality,
   &Extension,
   &presence
              Presence
WITH SYNTAX {
   ID &id
   CRITICALITY &criticality
   EXTENSION &Extension
   PRESENCE
           &presence
   ****************
-- Class Definition for Private IEs
  ******************
NBAP-PRIVATE-IES ::= CLASS {
        PrivateIE-ID,
   &criticality Criticality,
   &Value,
   &presence
              Presence
WITH SYNTAX {
        &id
  ID
   CRITICALITY &criticality
  TYPE &Value
   PRESENCE &presence
  ****************
-- Container for Protocol IEs
__ *******************
ProtocolIE-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
   SEQUENCE (SIZE (0..maxProtocolIEs)) OF
   ProtocolIE-Field {{IEsSetParam}}
ProtocolIE-Single-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
   ProtocolIE-Field {{IEsSetParam}}
```

```
ProtocolIE-Field {NBAP-PROTOCOL-IES : IESSetParam} ::= SEQUENCE {
         NBAP-PROTOCOL-IES.&id
                                 ({IEsSetParam}).
   criticality
                NBAP-PROTOCOL-IES.&criticality ({IEsSetParam}{@id}),
             NBAP-PROTOCOL-IES.&Value
                                      ({IEsSetParam}{@id})
  ******************
  Container for Protocol IE Pairs
  *****************
ProtocolIE-ContainerPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
   SEQUENCE (SIZE (0..maxProtocolIEs)) OF
   ProtocolIE-FieldPair {{IEsSetParam}}
ProtocolIE-FieldPair {NBAP-PROTOCOL-IES-PAIR : IESSetParam} ::= SEQUENCE
                       NBAP-PROTOCOL-IES-PAIR.&id
                                                              ({IEsSetParam}),
   firstCriticality
                                                              ({IEsSetParam}{@id}),
                       NBAP-PROTOCOL-IES-PAIR.&firstCriticality
   firstValue
                     NBAP-PROTOCOL-IES-PAIR.&FirstValue
                                                              ({IEsSetParam}{@id}),
   secondCriticality NBAP-PROTOCOL-IES-PAIR.&secondCriticality
                                                              ({IEsSetParam}{@id}),
   secondValue
                                                              ({IEsSetParam}{@id})
                       NBAP-PROTOCOL-IES-PAIR. & SecondValue
    ****************
-- Container Lists for Protocol IE Containers
     **********************
ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES : IESSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-Container {{IEsSetParam}}
ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES-PAIR : IESSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-ContainerPair {{IEsSetParam}}
    -- Container for Protocol Extensions
  ProtocolExtensionContainer {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
   SEOUENCE (SIZE (1..maxProtocolExtensions)) OF
   ProtocolExtensionField {{ExtensionSetParam}}
ProtocolExtensionField {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
          NBAP-PROTOCOL-EXTENSION.&id ({ExtensionSetParam}),
   criticality NBAP-PROTOCOL-EXTENSION.&criticality
                                              ({ExtensionSetParam}{@id}),
   extensionValue NBAP-PROTOCOL-EXTENSION.&Extension ({ExtensionSetParam}{@id})
```

9.4 Message Transfer Syntax

NBAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ref. [11].

9.5 Timers

 $T_{Preempt}$

- Specifies the maximum time that a Node B may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

Handling of Unknown, Unforeseen and Erroneous Protocol Data

10.1 General

Protocol Error cases can be divided into three classes:

- Transfer Syntax Error
- Abstract Syntax Error
- Logical Error

Protocol errors can occur in the following functions within a receiving node:

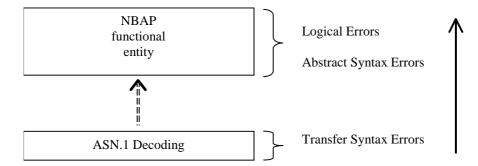


Figure 38: Protocol Errors in NBAP.

The information stated in subclauses 10.2, 10.3 and 10.4, to be included in the message used when reporting an error, is what at minimum shall be included. Other optional information elements within the message may also be included, if available. This is also valid for the case when the reporting is done with a response message. The latter is an exception to what is stated in subclause 4.1.

10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. e.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error.

- Violation in list element constraints. e.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, than this case will be handled as a transfer syntax error.
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional NBAP entity:

- 1. receives IEs or IE groups that cannot be understood (unknown id);
- 2. receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
- 3. does not receive IEs or IE groups but according to the specified presence of the concerned object, the IEs or IE groups should have been present in the received message;
- 4. receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
- 5. receives IEs or IE groups but according to the conditional presence of the concerned object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the NBAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE
- Ignore IE and Notify Sender
- Ignore IE

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by the receiving entity (some may still remain unsupported).

2. EP: The comprehension of different EPs within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, NBAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the concerned object of class NBAP-PROTOCOL-IES, NBAP-PROTOCOL-IES-PAIR, NBAP-PROTOCOL-EXTENSION or NBAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

- 1. Optional;
- 2. Conditional;
- 3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

10.3.4 Not comprehended IE/IE group

10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

Reject IE:

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

- If a message is received with a *Procedure ID* marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the procedure.

When using the Error Indication procedure to reject a procedure or to report an ignored procedure it shall include the *Procedure ID* IE, the *Triggering Message* IE, and the *Procedure Criticality* IE in the *Criticality Diagnostics* IE.

10.3.4.1A Type of Message

When the receiving node cannot decode the *Type of Message* IE, the Error Indication procedure shall be initiated with an appropriate cause value.

10.3.4.2 IEs Other Than the Procedure ID and Type of Message

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure ID* IE and *Type of Message* IE according to the following:

Reject IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Reject IE*" which the receiving node does not comprehend; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the rejection of one or more IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing one or more IEs/IE groups marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a *response* message is received containing one or more IEs/IE groups marked with "*Reject IE*" that the receiving node does not comprehend, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and report in the response message of the procedure that one or more IEs/IE groups have been ignored. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report the outcome of the procedure is received containing one or more IEs/IE groups marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups, and initiate the Error Indication procedure to report that one or more IEs/IE groups have been ignored.
- If a *response* message is received containing one or more IEs/IE groups marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and initiate the Error Indication procedure.

Ignore IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.
- If a *response* message is received containing one or more IEs/IE groups marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

When reporting not comprehended IEs/IE groups marked with "Reject IE" or "Ignore IE and Notify Sender" using a response message defined for the procedure, the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

When reporting not comprehended IEs/IE groups marked with "Reject IE" or "Ignore IE and Notify Sender" using the Error Indication procedure, the Procedure ID IE, the Triggering Message IE, Procedure Criticality IE, the Transaction ID IE, and the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be

included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

10.3.5 Missing IE or IE Group

The receiving node shall treat the missing IE/IE group according to the criticality information for the missing IE/IE group in the received message specified in the version of this specification used by the receiver:

Reject IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Reject IE*"; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the missing IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report unsuccessful outcome is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

Ignore IE and Notify Sender:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and report in the response message of the procedure that one or more IEs/IE groups were missing. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report the outcome of the procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.

Ignore IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE*", the receiving node shall ignore that those IEs/IE groups are missing and continue with the procedure based on the other IEs/IE groups present in the message.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using a response message defined for the procedure, the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using the Error Indication procedure, the Procedure ID IE, the Triggering Message IE, Procedure Criticality IE, the Transaction ID IE, and the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be

included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the *Message Structure* IE shall be included.

10.3.6 IEs or IE Groups Received in Wrong Order or With Too Many Occurrences or Erroneously Present

If a message with IEs or IE groups in wrong order or with too many occurrences is received or if IEs or IE groups with a conditional presence are present when the condition is not met (i.e. erroneously present), the receiving node shall behave according to the following:

- If a message *initiating* a procedure is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the cause value "Abstract Syntax Error (Falsely Constructed Message)" using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall terminate the procedure and initiate the Error Indication procedure, and use cause value "Abstract Syntax Error (Falsely Constructed Message)".
- If a *response* message is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

When determining the correct order only the IEs specified in the specification version used by the receiver shall be considered.

10.4 Logical Error

Logical error situations occur when a message is comprehended correctly, but the information contained within the message is not valid (i.e. semantic error), or describes a procedure which is not compatible with the state of the receiver. In these conditions, the following behaviour shall be performed (unless otherwise specified) as defined by the class of the elementary procedure, irrespective of the criticality of the IEs/IE groups containing the erroneous values.

Class 1:

Where the logical error occurs in a request message of a class 1 procedure, and the procedure has a message to report this unsuccessful outcome, this message shall be sent with an appropriate cause value.

Typical cause values are:

- Protocol Causes:
 - 1. Semantic Error
 - 2. Message not compatible with receiver state

Where the logical error is contained in a request message of a class 1 procedure, and the procedure does not have a message to report this unsuccessful outcome, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID* IE, the *Triggering Message* IE and the *Transaction ID* IE within the *Criticality Diagnostics* IE shall then be included in order to identify the message containing the logical error.

Where the logical error exists in a response message of a class 1 procedure, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

Class 2:

Where the logical error occurs in a message of a class 2 procedure, the procedure shall be terminated and the ERROR INDICATION procedure shall be initiated with an appropriate cause value. The *Procedure ID* IE, the *Triggering*

Message IE and the *Transaction ID* IE within the *Criticality Diagnostics* IE shall then be included in order to identify the message containing the logical error.

10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclause of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.
- If an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality 'ignore and notify' have earlier occurred within the same procedure.

Annex A (normative):

B or

Allocation and Pre-emption of Radio Links in the Node B

A.1 Deriving Allocation Information for a Radio Link

A.1.1 Establishment of a New Radio Link

The Allocation Information for a Radio Link in the case of establishment of a new Radio Link shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node

b) 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 pre-emption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to "shall not trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".

If one or more non-excluded transport channels that are intended to use the Radio Link to be established have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to "may trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "may trigger pre-emption".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.1.2 Modification of an Existing Radio Link

The Allocation Information for a Radio Link in the case of modification of a Radio Link (addition or modification of transport channels using the Radio Link) shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node

b) a previous procedure adding or modifying the transport channel, or

c) the current procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels to be added or modified in the Radio Link is set to "no priority", the pre-emption capability of the Radio Link to be modified shall be set to "shall not trigger pre-emption".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels to be added or modified in the Radio Link is not set to "no priority", the allocation priority of and the pre-emption capability of the Radio Link to be modified shall be set according to the following:
 - The transport channels to be added or modified that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to "no priority" shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link to be modified.
 - The allocation priority for a Radio Link to be modified shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all the non-excluded transport channels that are to be added or modified.
 - If all non-excluded transport channels that are to be added or modified in the Radio Link have the preemption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to "shall not trigger pre-emption", the pre-emption capability of the Radio Link to be modified shall be set to "shall not trigger pre-emption".
 - If one or more of the non-excluded transport channels to be added or modified in the Radio Link have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to "may trigger pre-emption", the pre-emption capability of the Radio Link to be modified shall be set to "may trigger pre-emption".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.2 Deriving Retention Information for a Radio Link

The Retention Information for an existing Radio Link shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B context in the

- b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more transport channels using the Radio Link is set to "no priority", the pre-emption vulnerability of the Radio Link shall be set to "not pre-emptable".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all the transport channels using the Radio Link is not set to "no priority", the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
 - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
 - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to "pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "pre-emptable".

 If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to "not pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "not pre-emptable".

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

A.3 The Allocation/Retention Process

The Node B shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio Link to be established or modified. The Allocation Information is derived according to clause A.1.
- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the cell.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- -. If the pre-emption capability for a Radio Link to be established or modified is set to "may trigger preemption" and the resource situation so requires, the Node B may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- -. If the pre-emption capability for a Radio Link to be established or modified is set to "shall not trigger pre-emption", then this allocation request shall not trigger the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to "pre-emptable", then this Radio Link shall be included in the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to "not pre-emptable", then this Radio Link shall not be included in the pre-emption process in clause A.4.

A.4 The Pre-emption Process

The pre-emption process shall only pre-empt Radio Links with lower retention priority than the allocation priority of the Radio Link to be established or modified. The Radio Links to be pre-empted shall be selected in ascending order of the retention priority.

When the pre-emption process detects that one or more Radio Links have to be pre-empted to free resources for a Radio Link(s) to be established or modified, the Node B shall initiate the Radio Link Pre-emption procedure for all the Node B Communication Contexts having Radio Links selected for pre-emption and start the $T_{Preempt}$ timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the Node B shall stop the T_{Preempt} timer and complete the procedure that triggered the pre-emption process in accordance with the "Successful Operation" subclause of the procedure.

If the T_{Preempt} timer expires, the Node B shall regard the procedure that triggered the pre-emption process as failed and complete the procedure in accordance with the "Unsuccessful Operation" subclause of the procedure.

Annex B (informative): Measurement Reporting

When the *Report Characteristics* IE is set to "Event A" (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

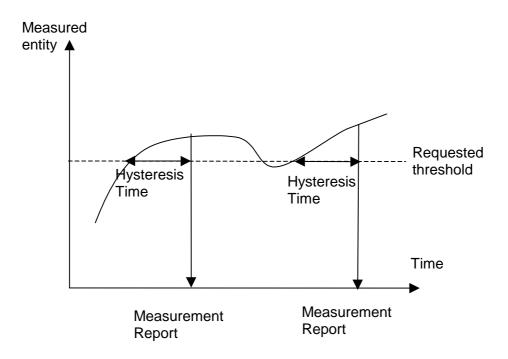


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event B" (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

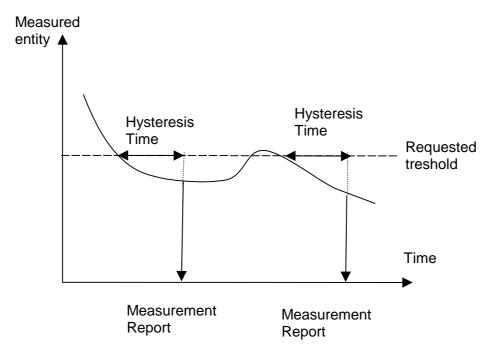


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event C" (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

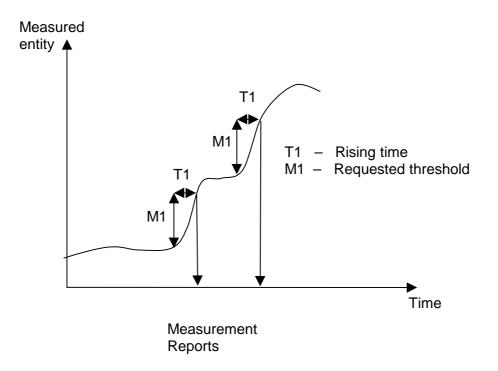


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to "Event D" (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

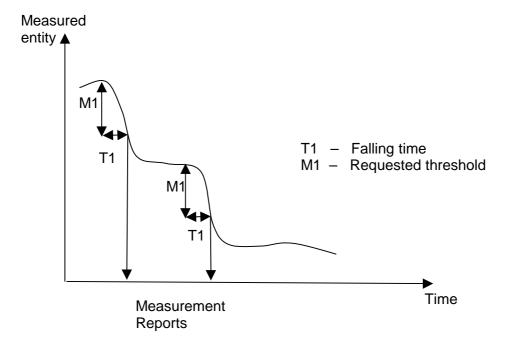


Figure B.4: Event D reporting

When the *Report Characteristics* IE is set to "Event E" (figure B.5), the Measurement Reporting procedure (Report A) is initiated always when the measured entity rises above the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.5). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity falls below the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity falls below the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

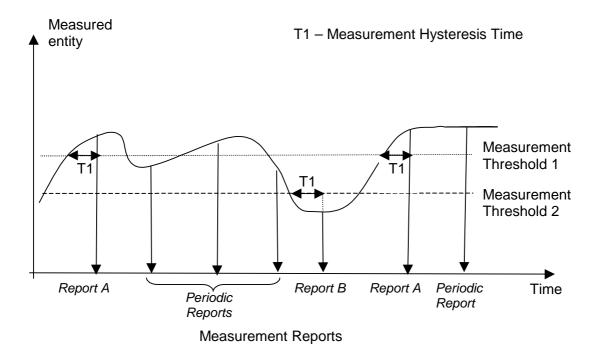
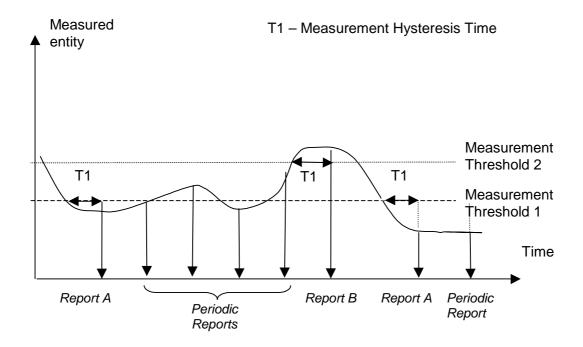


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to "Event F" (figure B.6), the Measurement Reporting procedure (Report A) is initiated always when the measured entity falls below the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.6). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity rises above the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity rises above the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.



Measurement Reports

Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

Annex C (informative): Guidelines for Usage of the Criticality Diagnostics IE

C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE Type and Referenc e	Semantics Description	Criticality	Assigned Criticality
Message Type	М				YES	reject
Transaction ID	М				_	
A	M				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	M				YES	reject
>>J		1 <maxj></maxj>			_	
>>>G		03,			EACH	reject
С	M				YES	reject
>K		1 <maxk></maxk>			EACH	ignore and notify
>>L		1 <maxl></maxl>			_	
>>>M	0				_	
D	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.

C.2 Example on a Received EXAMPLE MESSAGE

Assume further more that a received message based on the above tabular format is according to the figure below.

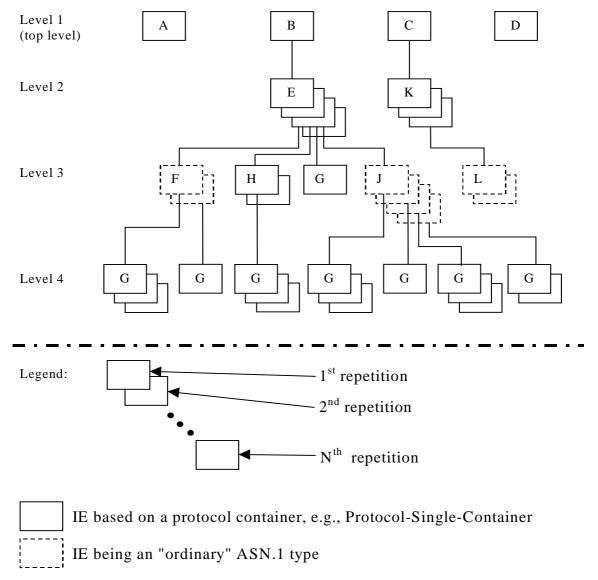
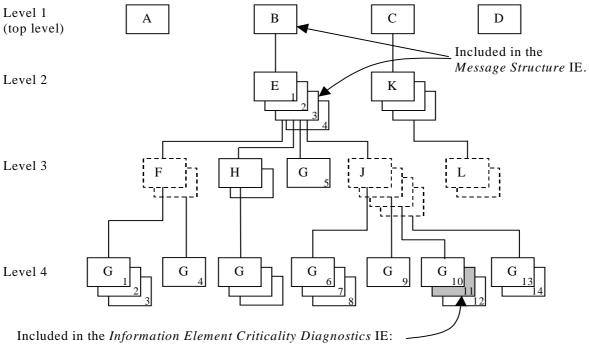


Figure C.1: Example of content of a received NBAP message based on the EXAMPLE MESSAGE

C.3 Content of Criticality Diagnostics

C.3.1 Example 1



- a) IE ID IE
- b) Repetition Number IE

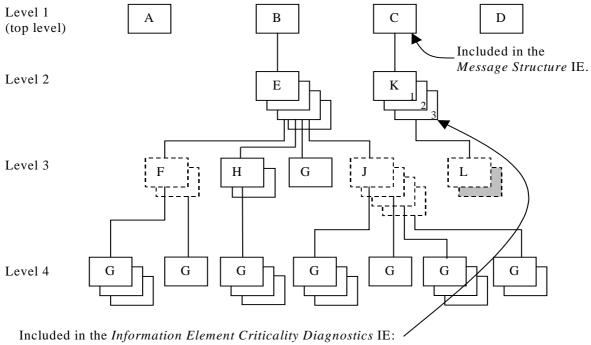
Figure C.2: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition	11	Repetition number on the reported level, i.e. level 4.
Number		(Since the IE E (level 2) is the lowest level included in the Message Structure IE this is
		the eleventh occurrence of IE G within the IE E (level 2).
Type of Error	not	
	underst	
	ood	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	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



- a) IE ID IE
- b) Repetition Number IE

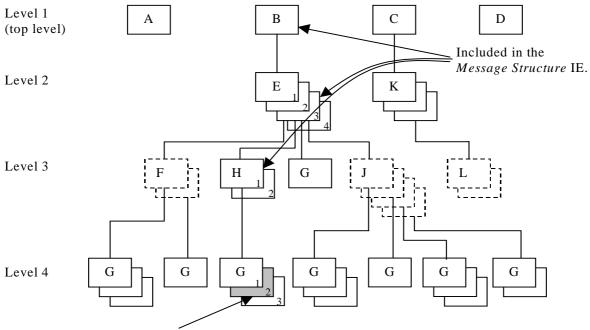
Figure C.3: Example of a received NBAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore	Criticality for IE on the reported level, i.e. level 2.
	and	
	notify	
IE ID	id-K	IE ID from the reported level, i.e. level 2.
Repetition	3	Repetition number on the reported level, i.e. level 2.
Number		
Type of Error	not	
	underst	
	ood	
Message Structure, first repetition		
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.

Note 4. The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

C.3.3 Example 3



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

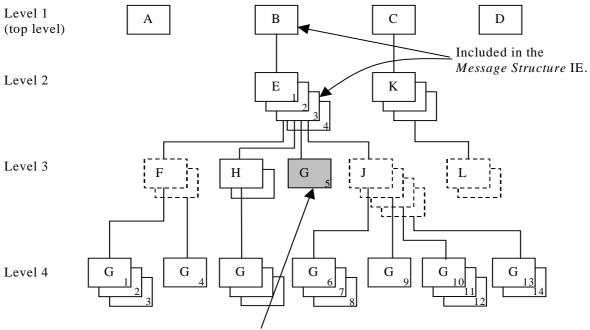
Figure C.4: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE H shown in the figure C.4 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore	Criticality for IE on the reported level, i.e. level 4.
	and	
	notify	
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition	2	Repetition number on the reported level, i.e. level 4.
Number		
Type of Error	not	
	underst	
	ood	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	e, second	repetition
>IE ID	id-E	IE ID from level 2.
>Repetition	3	Repetition number from level 2.
Number		
Message Structur	e, third rep	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.3.4 Example 4



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

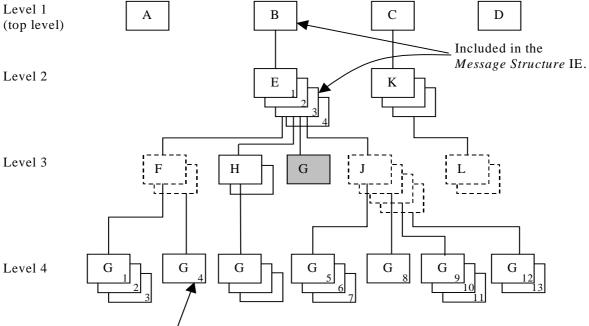
Figure C.5: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE E shown in the figure C.5 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition	5	Repetition number on the reported level, i.e. level 3.
Number		(Since the IE E (level 2) is the lowest level included in the Message Structure IE this is
		the fifth occurrence of IE G within the IE E (level 2).
Type of Error	not	
	underst	
	ood	
Message 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 6. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.5 Example 5



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

Figure C.6: Example of a received NBAP message with a missing IE

If the instance marked as grey in the IE G in the IE E shown in the figure C.6 above, is missing this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	4	Repetition number up to the missing IE on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE there have been four occurrences of IE G within the IE E (level 2) up to the missing occurrence.
Type of Error Message Structur	missing re, first repe	
>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 NBAP-PROTOCOL-IES ::= {
    { ID id-A CRITICALITY reject TYPE A PRESENCE mandatory} | { ID id-B CRITICALITY reject TYPE B PRESENCE mandatory} | { ID id-C CRITICALITY reject TYPE C PRESENCE mandatory} | { ID id-D CRITICALITY reject TYPE D PRESENCE mandatory} ,
}
B ::= SEQUENCE {
                     E-List,
    iE-Extensions ProtocolExtensionContainer { {B-ExtIEs} } OPTIONAL,
B-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-IEs} }
E-IES NBAP-PROTOCOL-IES ::= {
   { ID id-E CRITICALITY ignore TYPE E PRESENCE mandatory }
E ::= SEQUENCE {
                     F-List,
   h
                    H-List,
    g
                    G-List1,
                    J-List,
    iE-Extensions ProtocolExtensionContainer { {E-ExtIEs} } OPTIONAL,
}
E-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
}
F-List ::= SEQUENCE (SIZE (1..maxF)) OF F
F ::= SEQUENCE {
                     G-List2 OPTIONAL.
    iE-Extensions ProtocolExtensionContainer { {F-ExtIEs} } OPTIONAL,
F-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
G-List2 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G2-IEs} }
G2-IES NBAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY ignore TYPE G PRESENCE mandatory }
H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }
H-IES NBAP-PROTOCOL-IES ::= {
    H ::= SEQUENCE {
                    G-List3 OPTIONAL,
                                     ProtocolExtensionContainer { {H-ExtIEs} } OPTIONAL,
    iE-Extensions
H-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container \{ \{G3\text{-}IEs\} \}
G3-IES NBAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY notify TYPE G PRESENCE mandatory }
G-List1 ::= ProtocolIE-Single-Container { G1-IEs} }
G1-IEs NBAP-PROTOCOL-IES ::= {
    J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J
J ::= SEQUENCE {
                   G-List4 OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
J-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G4-IEs} }
G4-IES NBAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
C ::= SEQUENCE {
   k
                   K-List,
    iE-Extensions ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
C-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }
K-IES NBAP-PROTOCOL-IES ::= {
   { ID id-K CRITICALITY notify TYPE K PRESENCE mandatory }
K ::= SEQUENCE {
                   L-List,
    \begin{tabular}{ll} \hline iE-ExtensionS & ProtocolExtensionContainer $\{ \ \{K-ExtIEs\} \ \}$ & OPTIONAL, \\ \hline \end{tabular}
K-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
L-List ::= SEQUENCE (SIZE (1..maxL)) OF L
L ::= SEQUENCE {
                   M OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
L-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ExampleMessage-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

Annex D (normative): IB_SG_DATA Encoding

D.1 Overall Description

There exist two variants for encoding *IB_SG_DATA* IE (see section 9.2.1.32), which are detailed in subsections below. To avoid incorrect transmission of System Information on Uu, the following behaviour is required:

- For each Iub, CRNC shall use the encoding variant supported by the Node B for the *IB_SG_DATA* IE (see section 9.2.1.32) when sending the SYSTEM INFORMATION UPDATE REQUEST message to the Node B. This is supported by configuration in the CRNC.

D.2 IB_SG_DATA Encoding Variant 1

This variant corresponds to the algorithm, that ASN.1 length encoding for the conveyed SIB segment is performed by the RNC. Building of IB_SG_DATA segments involves two steps:

- 1) Segmentation of MIB/SIB/SB and
- 2) RRC encoding of the segments, which includes the PER encoding of the length in case of 'SIB data variable'.

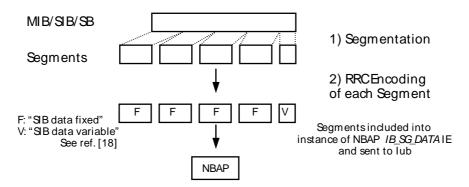


Figure A.1: The Building of Segments

D.3 IB_SG_DATA Encoding Variant 2

This variant corresponds to the algorithm, that ASN.1 length encoding for the conveyed segment is not performed by the RNC. Segments are built in the CRNC by segmentation of a MIB/SIB/SB.

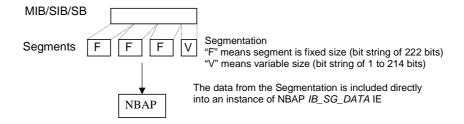


Figure A.2: The Building of Segments

Annex E (informative): Change history

					ge history
TSG RAN#	Version	CR	Tdoc RAN	New Version	Subject/Comment
RAN_06	-	-	RP-99764	3.0.0	Approved at TSG RAN #6 and placed under Change Control
RAN_07	3.0.0	-	-	3.1.0	Approved at TSG RAN #7
RAN_08	3.1.0	-	RP-000250	3.2.0	Approved at TSG RAN #8
RAN_08	3.1.0	-	RP-000251	3.2.0	Approved at TSG RAN #8
RAN_08	3.1.0	-	RP-000252	3.2.0	Approved at TSG RAN #8
RAN_08	3.1.0	-	RP-000253	3.2.0	Approved at TSG RAN #8
RAN_09	3.2.0	165 168- 170, 173- 178, 180- 189	RP-000386	3.3.0	Approved at TSG RAN #9
RAN_09	3.2.0	190- 200, 203 205 207 208 211 214 218- 219	RP-000387	3.3.0	Approved at TSG RAN #9
RAN_09	3.2.0	221 222 224- 228 233 244, 246	RP-000388	3.3.0	Approved at TSG RAN #9
RAN_09	3.2.0	247- 248	RP-000389	3.3.0	Approved at TSG RAN #9
RAN_10	3.3.0	250- 324	RP-000627 RP-000628 RP-000630 RP-000697	3.4.0	Approved at TSG RAN #10
RAN_10	3.4.0			3.4.1	Correct of headers
RAN_11	3.4.1	325- 330, 333- 336, 339- 342, 344, 346- 348, 350- 356, 365, 367- 371, 377- 379, 383, 385- 386, 386, 388	RP-010125 RP-010126	3.5.0	Approved at TSG RAN #11

Date	TSG#	TSG Doc.	CR	Re	Change history Subject/Comment	Old	New
				v			
March 01	11	RP-010160	87		Approved at TSG RAN #11 and placed under Change Control	-	4.0.0
March 01	11	RP-010166			Approved at TSG RAN #11 and placed under Change Control	-	4.0.0
March 01	11	RP-010159	372,3 74,38 1		Approved at TSG RAN #11 and placed under Change Control	-	4.0.0
March 01	11	RP-010164	358,3 59		Approved at TSG RAN #11 and placed under Change Control	-	4.0.0
March 01	11	RP-010167	362		Approved at TSG RAN #11 and placed under Change Control	-	4.0.0
06/2001	12	RP-010383	390,3 92,39 4,396, 398,4 00,40 2,404,		Approved at TSG RAN #12	4.0.0	4.1.0
06/2001	12	RP-010384	412,4 16,42 1,423, 427,4 31,43 3,437, 439,4		Approved at TSG RAN #12	4.0.0	4.1.0
06/2001	12	RP-010385			Approved at TSG RAN #12	4.0.0	4.1.0
06/2001	12	RP-010396			Approved at TSG RAN #12	4.0.0	4.1.0
09/2001	13	RP-010587	410	2	Ambiguity in CM handling	4.1.0	4.2.0
09/2001	13	RP-010587			Correction to Information Block Deletion	4.1.0	4.2.0
09/2001	13	RP-010587			Clarification of the AICH power	4.1.0	4.2.0
09/2001	13	RP-010587		1	Transport bearer replacement clarification	4.1.0	4.2.0
09/2001	13	RP-010587		1	Corrections to the PDSCH Code Mapping IE	4.1.0	4.2.0
09/2001	13	RP-010587		1	Correction to the handling of DL Code Information in RL Reconfiguration procedures	4.1.0	4.2.0
09/2001	13	RP-010587	485	1	Correction to the Error handling of the ERROR INDICATION message	4.1.0	4.2.0
09/2001	13	RP-010587			Correct max Codes discrepancy between tabular and ASN.1	4.1.0	4.2.0
09/2001	13	RP-010587			S-CCPCH Corrections for TDD	4.1.0	4.2.0
09/2001	13	RP-010587		1	Nbap criticality	4.1.0	4.2.0
09/2001	13 13	RP-010588 RP-010588		1	Clarification of Abnormal Conditions/Unsuccessful Operation Error handling of erroneously present conditional IEs	4.1.0	4.2.0
09/2001 09/2001	13	RP-010588		1	Correction for maxNrOfCPCHs	4.1.0	4.2.0
09/2001	13	RP-010588		1	Correction for N_EOT	4.1.0	4.2.0
09/2001	13	RP-010588		Ė	Bitstrings ordering	4.1.0	4.2.0
09/2001	13	RP-010588			Mapping of TFCS to TFCI	4.1.0	4.2.0
09/2001	13	RP-010588			Correction of implementation of RAN#12 CRs	4.1.0	4.2.0
09/2001	13	RP-010588	521		TDD Channelisation code range definition	4.1.0	4.2.0
09/2001	13	RP-010588		1	Clarification of chapter 10	4.1.0	4.2.0
09/2001	13	RP-010588			Clarification of use of Diversity Control Indicator	4.1.0	4.2.0
09/2001 09/2001	13 13	RP-010588		3	Clarification of coordinated DCHs Allowed Combinations of Dedicated Measurement Type and the	4.1.0	4.2.0
00/2004	12	RP-010599		2	Reporting Characteristics Type	440	400
09/2001 09/2001	13 13	RP-010599 RP-010599			Support of 8PSK modulation for LCR TDD DPC Mode in Radio Link Addition procedure	4.1.0	4.2.0
09/2001	13	RP-010599			Correction on NBAP function	4.1.0	4.2.0
09/2001	13	RP-010599		1	Adding protocol container in CHOICE type IE	4.1.0	4.2.0
09/2001	13	RP-010599		1	Clarification of Abnormal Conditions/Unsuccessful Operation	4.1.0	4.2.0
09/2001	13	RP-010599		1	Corrections to position reporting	4.1.0	4.2.0
09/2001	13	RP-010599		2	CR to 25.433 v4.1.0: RX timing deviation as dedicated	4.1.0	4.2.0

		<u> </u>			measurement for 1.28Mcps TDD		
09/2001	13				The decirement for the emope 199	4.1.0	4.2.
							0
40/0004	_	RP-010599	522	1	Clarification on the Time Slot LCR	4.0.0	1.0
10/2001	-					4.2.0	4.2. 1
		_	_	-	Editorial correction to correct the header		'
12/2001	14					4.2.1	4.3.
							0
12/2001	14	RP-010897	530	2	CR on Priority range	4.2.1	4.0
12/2001	14					4.2.1	4.3. 0
		RP-010862	534		Bitstrings ordering		
12/2001	14					4.2.1	4.3.
					Added UTRAN modes in the IE Type and Reference and		0
12/2001	14	RP-010862	536		Semantics Description in IEs in NBAP messages	4.2.1	4.0
12/2001	14				Alignment to BANA appearant Transmitted Code Bower	4.2.1	4.3. 0
		RP-010862	538		Alignment to RAN4 spec for Transmitted Code Power Measurement		١
12/2001	14					4.2.1	4.3.
							0
12/2001	14	RP-010862	540		Correction the Clause 10 Error Handling	4.2.1	4.2
12/2001	14					4.2.1	4.3. 0
		RP-010862	542		Clarification of TrCh Ordering in TFCS		١
12/2001	14					4.2.1	4.3.
							0
12/2001	14	RP-010862	544		Addition of SIB15.4 and SIB18 to tabular	4.2.1	4.0
12/2001	14					4.2.1	4.3. 0
		RP-010862	550		Transmit Diversity for TDD		١
12/2001	14				,	4.2.1	4.3.
							0
12/2001	14	RP-010862	552		Clarification for the definition of the ASN.1 constants	4.2.1	4.3.
12/2001	14					4.2.1	4.3. 0
		RP-010862	559	1	Terminology Corrections		١
12/2001	14				-	4.2.1	4.3.
				١.			0
12/2001	14	RP-010863	560	1	Rel-4 specific terminology corrections	4.2.1	4.3.
12/2001						1.2	0
		RP-010863	562		Procedure Code Criticality in Error Indication		
12/2001	14					4.2.1	4.3.
		DD 040000	505		Clarification for the Power Adjustment Type IE in the DL POWER		0
12/2001	14	RP-010863	565		CONTROL REQUEST message	4.2.1	4.3.
							0
		RP-010863	567	1	Forward Compatibility for DL Power Balancing		
12/2001	14					4.2.1	4.3.
		DD 040000	E60		Beconfiguration elerification		0
12/2001	14	RP-010863	209	\vdash	Reconfiguration clarification	4.2.1	4.3.
							0
		RP-010863	571	2	Addition of amendment to clarify the PER encoding of bitstrings		
12/2001	14					4.2.1	4.3.
		RP-010863	575	2	Transport Bearer replacement clarification for the DSCH case		0
12/2001	14	141 -010003	5/3		Transport Dearer replacement diamineation for the DOOT case	4.2.1	4.3.
							0
		RP-010863	577		Clarification of the Transaction ID		
12/2001	14					4.2.1	4.3.
		RP-010863	570	1	CPCH-related corrections		0
12/2001	14	RP-010863		+	Correction of S field length	4.2.1	4.3.
	_1	171 -010003	JUZ	1	Toomedian or a new length		т.∪.

							0
12/2001	14					4.2.1	4.3.
							0
12/2001	14	RP-010874	546	1	Correction of drift rate resolution	4.2.1	4.3.
12/2001	1-7					7.2.1	4.3. 0
		RP-010874	547		Cell Parameter ID IE definition for 1.28Mcps TDD		Ŭ
12/2001	14					4.2.1	4.3.
		RP-010874	5/18		Amendment of the RADIO LINK ADDITION RESPONSE TDD message for LCR TDD		0
12/2001	14	KF-010074	340		inessage for ECK 1DD	4.2.1	4.3.
							0
10/0001		RP-010874	580	2	SFN-SFN quality indication		
12/2001	14				0	4.2.1	4.3.
		RP-010912	545	1	Correction to SFN-SFN Observed Time Difference Measurement report mapping		0
03/2002	15				Topon mapping	4.3.0	4.4.
					Incorrect Physical Shared Channel TDD Procedure definition in		0
03/2002	15	RP-020174	591	1	ASN.1	4.3.0	1 1
03/2002	13				Removal of criticality information for Transaction ID in the ERROR	4.5.0	4.4. 0
		RP-020174	593		INDICATION message		
03/2002	15					4.3.0	4.4.
		DD 000474	000		Ober 15 and 15 a		0
03/2002	15	RP-020174	600		Clarification to measurement unit at Higher Layer Filtering.	4.3.0	4.4.
					Correction of the Limited Power Increase in Synchronised Radio		0
		RP-020174	605		Link Reconfiguration Preparation		
03/2002	15					4.3.0	4.4.
		RP-020174	623	1	Correction to physical channels which SCTD can be applied (lub)		0
03/2002	15	RP-020182			Corrections to the Information Exchange Initiation procedure	4.3.0	4.4.
							0
02/2022	4.5	RP-020182	500	4	Connection to LIE monition management and the and the school	400	1 1
03/2002	15	RP-020182	586	1	Correction to UE position measurements quality and threshold information	4.3.0	4.4. 0
							U
03/2002	15	RP-020182	587	1	Correction to UE position measurements change and deviation limit	4.3.0	4.4.
					formulas		0
03/2002	15	RP-020182	601	1	Modification of the T_utran-gps length	4.3.0	4.4.
00/2002		020102	001	·	modification of the 1_ditant gpo longin	1.0.0	0
03/2002	15	RP-020182	606		Amendment of the COMMON MEASUREMENT INITIATION REQUEST message	4.3.0	4.4.
					INEQUEUT message		0
03/2002	15	RP-020182	609	1	ASN.1 and tabular amendments for LCR TDD	4.3.0	4.4.
							0
00/0000	4.5	DD 000400	040		Midwelle shift OD is the DUVOICAL CALIDED COLLANDED	400	
03/2002	15	RP-020182	610		Midamble shift LCR in the PHYSICAL SAHRED SCHANNEL RECONFIGURATION REQUEST [TDD] message	4.3.0	4.4.
							0
03/2002	15	RP-020182	617		NBAP Rapporteur corrections	4.3.0	4.4.
							0
03/2002	15				Removing of channel coding option "no coding" for	4.3.0	4.4.
30,2002					FDD	1.0.0	0
		RP-020231	628	2			
03/2002	15				DL Power Capability as a shared resource between	4.4.0	5.0.
		DD 020499	12F	4	Cells		0
03/2002	i	RP-020188	420	4		4.4.0	-
03/2002	15					4.4.0	י יו כן
03/2002	15				Power Balancing Activation with Radio Link Setup and Radio Link	4.4.0	5.0. 0

03/2002	15	RP-020188	407	3	Power Balancing Restart with Radio Link Reconfiguration procedure in NBAP	4.4.0	5.0. 0
03/2002	15	KF-020100	491	3	procedure in NBAF	4.4.0	5.0.
		RP-020188	502	2	Initial DL Power After addition of CCTrCH in Synchronized Reconfiguration		0
03/2002	15					4.4.0	5.0.
							0
00/000	1	RP-020194	583		NBAP Signalling support for flexible hard split		ļ
03/2002	15					4.4.0	5.0.
		RP-020193	594	3	Add IPDL parameters for LCR TDD in CELL SETUP REQUEST and CELL RECONFIGURATION REQUEST in NBAP message.		0
03/2002	15	KF-020193	304	3	and CELL RECONFIGURATION REQUEST III NDAF Message.	4.4.0	5.0.
							0
		RP-020198	588	1	Re-arrangement of lub Transport Bearers		
03/2002	15					4.4.0	5.0.
							0
00/0000	45	RP-020190	589	2	HSDPA NBAP Common Procedure Modifications	1.1.0	
03/2002	15					4.4.0	5.0.
		RP-020189	597	2	Introduction of IP Transport option in UTRAN		0
03/2002	15	141 020100	007		Transport option in Ontolin	4.4.0	5.0.
							0
		RP-020188	598		Introduction separate max PDSCH power limitation		
03/2002	15					4.4.0	5.0.
							0
03/2002	15	RP-020199	602	2	Separation of Resource Reservation and Radio Link Activation	4.4.0	5 0
03/2002	15					4.4.0	5.0.
		RP-020196	603		Introduction of RL Timing Adjustment support		0
03/2002	15	1020100	000		Introduction of the filling flajacation support	4.4.0	5.0.
					Introduction of the Neighbouring TDD Cell Measurement		0
		RP-020193	607	1	Information LCR		
03/2002	15					4.4.0	5.0.
		DD 000404	000		Nada Dayrahyaniaatian fay 4 20Mana TDD		0
03/2002	15	RP-020191	608	2	Node B synchronisation for 1.28Mcps TDD	4.4.0	5.0.
00/2002						7.4.0	0
		RP-020190	612	3	HSDPA RL-Level Signalling for TDD & FDD		
03/2002	15					4.4.0	5.0.
					Introduction of Angle of Arrival enhanced UE positioning for		0
00/0000	45	RP-020193	613	1	1.28Mcps TDD in NBAP	1.1.0	
03/2002	15					4.4.0	5.0.
		RP-020194	626		NBAP changes for TFCI power control in DSCH hard split mode		0
06/2002	16	1020134	020		NBAL changes for 11 of power control in boot mare spir mode	5.0.0	5.1.
							0
		RP-020412	595	3	Introduction of Qth signalling in UTRAN		
06/2002	16					5.0.0	5.1.
							0
06/2002	16	RP-020412	633	-	Criticality Information Decoding Failure Handling	5.0.0	E 1
00/2002	10					3.0.0	5.1. 0
		RP-020412	636	1	Alignment of tabular and ASN.1 coding for DL power		١
06/2002	16	1			<u> </u>	5.0.0	5.1.
							0
00/05	1	RP-020412	639	1	Correction to RL Restore Indication		
06/2002	16					5.0.0	5.1.
		DD 000440	640		Line of DDCCH BL ID for TDD DCCH/ICCH		0
06/2002	16	RP-020412	048	1	Use of PDSCH RL ID for TDD DSCH/USCH	5.0.0	5.1.
30, 2002	1.					3.0.0	0
	1				OLICE CONTRACTOR OF THE CONTRA	1	١
		RP-020412	652		Clarification on the Neighboring TDD Cell Measurement information	1	

							0
06/2002	16					5.0.0	5.1.
		RP-020412	655		Removal of syntax errors from ASN.1		0
06/2002	16					5.0.0	5.1. 0
		RP-020412	656		Interaction between HSDPA and IP transport in UTRAN		
06/2002	16					5.0.0	5.1.
		RP-020412	658	1	Interaction between HSDPA and Bearer Re-arrangement		0
06/2002	16					5.0.0	5.1.
		RP-020412	659		Correction to Implementation of Rel-5		0
06/2002	16					5.0.0	5.1.
		RP-020412	662		Correction to the use of the CFN IE / SFN IE in the Measurement Initiation procedures		0
06/2002	16				,	5.0.0	5.1.
		RP-020412	665		TFCI 0 definition for TDD		0
06/2002	16					5.0.0	5.1.
		RP-020412	670	1	NBAP Review – Alignment on the ASN.1		0
06/2002	16					5.0.0	5.1.
		RP-020412	672	1	NBAP Review Alignment of the ASN.1		0

06/2002	16	RP-020412	675		Definition of quality figures for SFN-SFN and Tutran-gps measurement value information	5.0.0	5.1.0
06/2002	16	RP-020412		1	Clarification for the usage of the cause value	5.0.0	5.1.0
06/2002	16	RP-020412		2	HS-DSCH Initial credits F	5.0.0	5.1.0
06/2002	16	RP-020412		1	TFCI2 bearer clarification	5.0.0	5.1.0
09/2002	17	RP-020612			WG4 Reference Corrections	5.1.0	5.2.0
09/2002	17	RP-020614			Rx Timing Deviation (TDD) corrections	5.1.0	5.2.0
09/2002	17	RP-020616			Clarification on the Common Measurement Reporting procedure	5.1.0	5.2.0
09/2002	17	RP-020628		1	Correction of HSDPA Common Configuration	5.1.0	5.2.0
09/2002	17	RP-020628		Ī	TFCI2 Bearer correction for IP transport	5.1.0	5.2.0
09/2002	17	RP-020628		1	Partial dedicated measurement reporting	5.1.0	5.2.0
09/2002	17	RP-020647		3	CQI and ACK/NACK Repetition Factor and Power Offset and k-value	5.1.0	5.2.0
09/2002	17	RP-020622	714		Change of Maximum Number of HS-SCCH Codes	5.1.0	5.2.0
09/2002	17	RP-020618		1	Clarification for the initial power of the power balancing (Pinit)	5.1.0	5.2.0
09/2002	17	RP-020619	716		Removal of BLER for HS-DSCH	5.1.0	5.2.0
09/2002	17	RP-020617		1	Correction for inconsistency in length of TFCI field 3	5.1.0	5.2.0
09/2002	17	RP-020629			One possible invisible implementation for UTRAN pure systems of GERAN specific LCS change in RANAP	5.1.0	5.2.0
09/2002	17	RP-020589	721	1	Replacing all occurences of P _{SIR} (k) by P _{curr} in 25.423	5.1.0	5.2.0
09/2002	17	RP-020623		1	RL Parameter Update Procedure	5.1.0	5.2.0
09/2002	17	RP-020630		2	IP_offset correction	5.1.0	5.2.0
09/2002	17	RP-020613		2	Uplink Synchronisation in 1.28Mcps TDD	5.1.0	5.2.0
09/2002	17	RP-020609		2	Modification of PICH Parameters LCR TDD	5.1.0	5.2.0
09/2002	17	RP-020604		1	Handling of conflicting specification text	5.1.0	5.2.0
09/2002	17	RP-020609		1	Correction to the specification of Optional IEs	5.1.0	5.2.0
12/2002	18	RP-020009		1	Alignment of Error Indication procedure text to the latest RNSAP	5.2.0	5.3.0
12/2002	18	RP-020758			Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD	5.2.0	5.3.0
12/2002	18	RP-020757	751	1	Correction to RX Timing Deviation LCR value range	5.2.0	5.3.0
12/2002	18	RP-020759		2	Slot Format for 1.28Mcps TDD	5.2.0	5.3.0
12/2002	18	RP-020759 RP-020754		_	SYNC_DL_Code ID for 1.28Mcps TDD	5.2.0	5.3.0
12/2002	18	RP-020734		1	Measurement power offset signalling for HSDPA	5.2.0	5.3.0
	18	RP-020773 RP-020768		1	Power offset values for HS-DPCCH	5.2.0	5.3.0
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12/2002	18	RP-020855		3	MAC-hs Window Size	5.2.0	5.3.0
12/2002	18	RP-020754		1	Clarification on the Minimum Spreading Factor for TDD	5.2.0	5.3.0
12/2002	18	RP-020767		1	Addition of the second TDD Channelisation Code of HS-SCCH for the 1.28Mcps TDD option.	5.2.0	5.3.0
12/2002	18	RP-020765		1	Clarification of the usage of HS-DSCH-RNTI	5.2.0	5.3.0
12/2002 12/2002	18 18	RP-020754 RP-020763			Clarification to RACH for 1.28Mcps TDD Correction for the definition of the MAC-hs Reordering Buffer Size	5.2.0 5.2.0	5.3.0
12/2002	18	RP-020766	782		Clarification for the inclusion of the DL Power Balancing Updated	5.2.0	5.3.0
12/2002	18	RP-020744	795	1	Indicator IE Correction for the DL DPDCH transmission	5.2.0	5.3.0
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03/2003	19	RP-030081	801	1	HS-DSCH: addition of non-HS-DSCH power measurement	5.3.0	5.4.0
03/2003	19	RP-030080		1	Measurement for HS-SICH Outer Loop Power Control	5.3.0	5.4.0
03/2003	19	RP-030082		1	Corrections to Channelisation Code TFCI Mapping for TDD	5.3.0	5.4.0
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03/2003	19	RP-030076		2	Guaranteed Bit Rate for HSDPA	5.3.0	5.4.0
06/2003	20	RP-030332		1	Alignment of TDD HSDPA parameters to RAN2 and RAN 1.	5.4.0	5.5.0
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06/2003	20	RP-030320		1	Alignment of maximum HS DSCH code numbers to 25.211	5.4.0	5.5.0
06/2003	20	RP-030320			Correction in the tabular format of the CELL SYNCHRONISATION REPORT [TDD] message	5.4.0	5.5.0
06/2003	20	RP-030320			Clarification of optional IEs for Node B synchronisation for LCR TDD	5.4.0	5.5.0
,			0.40	1	TDD Channelisation Code LCR correction for HSDPA	5.4.0	5.5.0
06/2003	20	RP-030334	843		TDD Channelisation Code LCR conection for HSDFA	5.4.0	0.0.0

06/2003	20	RP-030329		1	HS-SCCH Change Indicator	5.4.0	5.5.0
06/2003	20	RP-030335			Correction to HARQ Memory Partitioning	5.4.0	5.5.0
06/2003	20	RP-030337			Correction for the value range of 'CQI Feedback cycle, k'	5.4.0	5.5.0
06/2003	20	RP-030336		1	Clarification for the handling of the HS-DSCH	5.4.0	5.5.0
06/2003	20	RP-030320		1	Clarification of SCCPCH maximum power for TDD	5.4.0	5.5.0
06/2003	20	RP-030328		2	Resource handling of HS-DSCH Guaranteed Bit Rate	5.4.0	5.5.0
06/2003	20	RP-030324			Alignment of the Requested Data Value Information IE description	5.4.0	5.5.0
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09/2003	21	RP-030445	886		Alignment of title and sub-clause text of chapter 10.3.4.2	5.5.0	5.6.0
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09/2003	21	RP-030441		1	Correction for the start code number of HS-PDSCH	5.5.0	5.6.0
09/2003	21	RP-030447		2	Coordination with RRC about the TFS of DL DCH for HS-DSCH	5.5.0	5.6.0
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09/2003	21	RP-030441	898	2	Clarification to the Constant Value for TDD	5.5.0	5.6.0
12/2003	22	RP-030674		1	Correction of wrong number in GPS Timing calculation	5.6.0	5.7.0
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12/2003	22	RP-030690		1	Resource Status Indication and Audit for HSDPA	5.6.0	5.7.0
12/2003	22	RP-030679		1	Unsynchronised RL Reconfiguration for HSDPA	5.6.0	5.7.0
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03/2004	23	RP-040071	974		NBAP Corrections for TDD	6.0.0	6.1.0
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03/2004	23	RP-040069	gan		Introduce the description of AOA measurement in the Allowed	6.0.0	

03/2004	23	RP-040071	985		Correction to HS-SCCH Code Range	6.0.0	6.1.0
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06/2004	24	RP-040181	1009		Power Balancing Corrections	6.1.0	6.2.0
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09/2004	25	RP-040302	1025		Correction to tabular text associated with TDD DPCH Offset IE	6.2.0	6.3.0
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09/2004	25	RP-040301	1036		Correction for HSDPA les	6.2.0	6.3.0
12/2004	26	RP-040434	1039		Removal of ASN ambiguity in TDD multiple RLs	6.3.0	6.4.0
12/2004	26	RP-040434	1041		Alignment of TFCI2/Signaling Bearer Re-arrangement IEs criticality and procedure text	6.3.0	6.4.0
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12/2004	26	RP-040437	1049	4	Introduction of MBMS	6.3.0	6.4.0
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03/2005	27	RP-050054	1070		Availability Status reference correction	6.4.0	6.5.0
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History

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