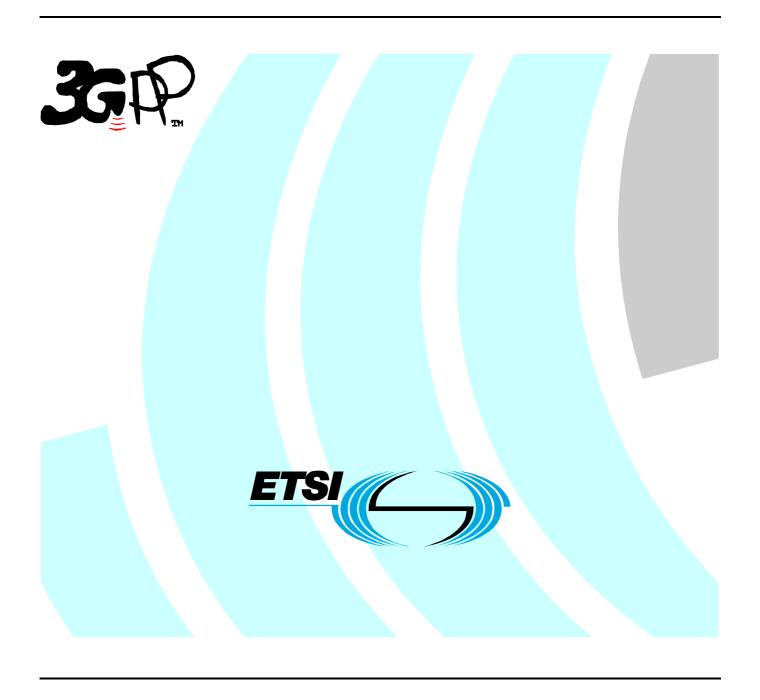
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# Foreword

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:

Version x.y.z

#### where:

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

#### 1 Scope

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

#### 2 References

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

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

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

- [48] Global Navigation Satellite System GLONASS Interface Control Document, Version 5, 2002.
- [49] 3GPP TS 25.308: "High Speed Downlink Packet Access (HSDPA); Overall description; Stage 2"

# 3 Definitions, Symbols and Abbreviations

#### 3.1 Definitions

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

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

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

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

Two kinds of EPs are used:

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

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

Successful

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

Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

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

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

# 3.2 Symbols

Void.

#### 3.3 Abbreviations

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

A-GPS Assisted GPS

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

CFN Connection Frame Number

CM Compressed Mode CPICH Common Pilot Channel

CRNC Controlling Radio Network Controller

DCH Dedicated Channel
DGANSS Differential GANSS
DGPS Differential GPS
DL Downlink

DPCCH Dedicated Physical Control Channel
DPCH Dedicated Physical Channel
DPDCH Dedicated Physical Data Channel
DSCH Downlink Shared Channel
E-AGCH E-DCH Absolute Grant Channel

E-DCH Enhanced UL DCH

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

E-RNTI E-DCH RNTI

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

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

FACH Forward Access Channel FDD Frequency Division Duplex

F-DPCH Fractional DPCH FP Frame Protocol

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

GANSS Galileo and Additional Navigation Satellite Systems

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

GNSS Global Navigation Satellite System
GPS Global Positioning System

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

HS-PDSCH High Speed Physical Downlink Shared Channel

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

ICD Interface Control Document IMB Integrated Mobile Broadcast

IP Internet Protocol

IPDL Idle Periods in the DownLink ISCP Interference Signal Code Power

L1 Layer 1 L2 Layer 2

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

MFN Multicast Frame Number MIB Master Information Block

MICH MBMS Notification Indicator Channel

MSAS Multi-functional Satellite Augmentation System

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

PCCPCH Primary Common Control Physical Channel

PCH Paging Channel

PDSCH Physical Downlink Shared Channel

PICH Paging Indication Channel

PLCCH Physical Layer Common Control Channel

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

RL Radio Link RLS Radio Link Set

RNC Radio Network Controller RRC Radio Resource Control SB Scheduling Block

SBAS Satellite Based Augmentation System

SCCPCH Secondary Common Control Physical Channel

SCH Synchronisation Channel
SCTD Space Code Transmit Diversity
SIB System Information Block
SRNC Serving Radio Network Controller

STTD Space Time Transmit Diversity

TDD Time Division Duplex

TFC Transport Format Combination

TFCI Transport Format Combination Indicator
TFCS Transport Format Combination Set

TFS Transport Format Set
TPC Transmit Power Control

TSTD Time Switched Transmit Diversity

UARFCN UTRA Absolute Radio Frequency Channel Number

UDP User Datagram Protocol

UE User Equipment

UL Uplink

UMTS Universal Mobile Telecommunications System

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

UTRAN Universal Terrestrial Radio Access Network

WAAS Wide Area Augmentation System

## 4 General

## 4.1 Procedure Specification Principles

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

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

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

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

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

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

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

## 4.2 Forwards and Backwards Compatibility

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

## 4.3 Specification Notations

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

- [FDD] This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.
- [TDD] This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[TDD]" and the section following the heading applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD.
- [3.84Mcps TDD] This tagging of a word indicates that the word preceding the tag "[3.84Mcps TDD]" applies only to 3.84Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[3.84Mcps TDD]" and the section following the heading applies only to 3.84Mcps TDD.
- [1.28Mcps TDD] This tagging of a word indicates that the word preceding the tag "[1.28Mcps TDD]" applies only to 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[1.28Mcps TDD]" and the section following the heading applies only to 1.28Mcps TDD.
- [7.68Mcps TDD] This tagging of a word indicates that the word preceding the tag "[7.68Mcps TDD]" applies only to 7.68Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[7.68Mcps TDD]" and the section following the heading applies only to 7.68Mcps TDD.
- [FDD ...] This tagging indicates that the enclosed text following the "[FDD " applies only to FDD.

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

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

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

the first letters in each word in upper case characters followed by the word "procedure", e.g. Radio

Link Setup procedure.

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

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

message.

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

is written with the first letters in each word in upper case characters and all letters in Italic font

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

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

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

(Reject)".

### 5 NBAP Services

#### 5.1 Parallel Transactions

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

# 6 Services Expected from Signalling Transport

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

## 7 Functions of NBAP

The NBAP protocol provides the following functions:

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

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

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
1	b) Unblock Resource
	c) Resource Status Indication
Configuration Alignment	a) Audit Required
	b) Audit
Managements on Common Bassers	c) Reset
Measurements on Common Resources	a) Common Measurement Initiation     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 Link Supervision.	b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup
	b) Radio Link Addition
	c) Compressed Mode Command
	d) Unsynchronised Radio Link Reconfiguration
	e) Synchronised Radio Link Reconfiguration
	Preparation   f) Synchronised Radio Link Reconfiguration
	Commit
	g) Synchronised Radio Link Reconfiguration
	Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation
	b) Dedicated Measurement Reporting
	c) Dedicated Measurement Termination d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations	Error Indication
Physical Shared Channel Management	Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Cell Synchronisation [1.28 Mcps TDD and 3.84	a) Cell Synchronisation Initiation
Mcps TDD]	b) Cell Synchronisation Reconfiguration
	c) Cell Synchronisation Reporting
	d) Cell Synchronisation Termination e) Cell Synchronisation Failure
	f) Cell Synchronisation Adjustment
Information Exchange	a) Information Exchange Initiation
	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
MBMS Notification	a) MBMS Notification Update

### 8 NBAP Procedures

# 8.1 Elementary Procedures

NBAP procedures are divided into common procedures and dedicated procedures.

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

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

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

Table 2: Class 1

Elementary	Message	Successful Outcome	Unsuccessful Outcome
Procedure		Response message	Response message
Cell Setup	CELL SETUP REQUEST	CELL SETUP RESPONSE	CELL SETUP FAILURE
Cell 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 Transport	COMMON TRANSPORT	COMMON TRANSPORT CHANNEL	COMMON TRANSPORT CHANNEL
Channel	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION
Reconfiguration	REQUEST	RESPONSE	FAILURE
Common	COMMON TRANSPORT	COMMON TRANSPORT	
Transport	CHANNEL DELETION	CHANNEL DELETION	
Channel Deletion	REQUEST	RESPONSE	
Physical Shared	PHYSICAL SHARED	PHYSICAL SHARED	PHYSICAL SHARED
Channel Reconfiguration	CHANNEL   RECONFIGURATION	CHANNEL RECONFIGURATION	CHANNEL RECONFIGURATION
Reconliguration	REQUEST	RESPONSE	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
System	REQUEST SYSTEM INFORMATION	RESPONSE SYSTEM INFORMATION	FAILURE SYSTEM INFORMATION
Information Update	UPDATE REQUEST	UPDATE RESPONSE	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 Radio Link	REQUEST RADIO LINK DELETION	RESPONSE RADIO LINK DELETION	FAILURE
Deletion	REQUEST	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	CELL SYNCHRONISATION	CELL	CELL
Synchronisation Reconfiguration [TDD]	RECONFIGURATION REQUEST	SYNCHRONISATION RECONFIGURATION RESPONSE	SYNCHRONISATION RECONFIGURATION FAILURE
Cell	CELL SYNCHRONISATION	CELL	CELL
Synchronisation Adjustment [TDD]	ADJUSTMENT REQUEST	SYNCHRONISATION ADJUSTMENT RESPONSE	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
Common Modediement Reporting	REPORT
Common Measurement	COMMON MEASUREMENT
Termination	TERMINATION REQUEST
Common Measurement Failure	COMMON MEASUREMENT
	FAILURE INDICATION
Synchronised Radio Link	RADIO LINK RECONFIGURATION
Reconfiguration Commit	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	COMPRESSED MODE COMMAND
[FDD]	
Unblock Resource	UNBLOCK RESOURCE INDICATION
Error Indication	ERROR INDICATION
Downlink Power Timeslot Control	DL POWER TIMESLOT CONTROL
[TDD]	REQUEST
Radio Link Pre-emption	RADIO LINK PREEMPTION
	REQUIRED INDICATION
Cell Synchronisation Reporting	CELL SYNCHRONISATION
[TDD]	REPORT
Cell Synchronisation Termination	CELL SYNCHRONISATION
[TDD]	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
D. II. Li L. A. d. di	INDICATION
Radio Link Activation	RADIO LINK ACTIVATION
	COMMAND
Radio Link Parameter Update	RADIO LINK PARAMETER UPDATE
MDMO NI CC. C. III. I	INDICATION
MBMS Notification Update	MBMS NOTIFICATION UPDATE
	COMMAND

### 8.2 NBAP Common Procedures

### 8.2.1 Common Transport Channel Setup

#### 8.2.1.1 General

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

#### 8.2.1.2 Successful Operation

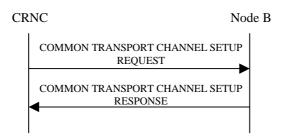


Figure 1: Common Transport Channel Setup procedure, Successful Operation

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

One message can configure only one of the following combinations:

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

#### **Secondary CCPCH:**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### PRACH:

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

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

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

### [1.28Mcps TDD - FPACH]:

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

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

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

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

#### [1.28Mcps TDD - PLCCH]:

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

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

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

#### RACH, FACH and PCH:

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

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

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

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

#### General:

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

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

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

# 8.2.1.3 Unsuccessful Operation

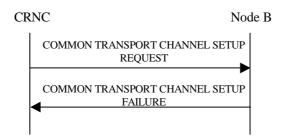


Figure 2: Common Transport Channel Setup procedure, Unsuccessful Operation

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

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

Typical cause values are as follows:

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

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

### **Transport Layer Cause:**

- Transport Resources Unavailable

### **Miscellaneous Cause:**

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

# 8.2.1.4 Abnormal Conditions

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

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

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

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

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

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

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

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

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

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

# 8.2.2 Common Transport Channel Reconfiguration

## 8.2.2.1 General

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

# 8.2.2.2 Successful Operation

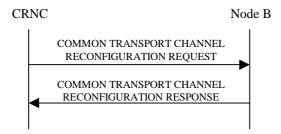


Figure 3: Common Transport Channel Reconfiguration, Successful Operation

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

One message can configure only one of the following combinations:

- [FDD - FACHs, one PCH, one PICH and/or one MICH related to one Secondary CCPCH], or

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

#### SCCPCH:

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

#### **FACH:**

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

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

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

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

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

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

#### PCH:

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

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

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

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

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

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

## PICH:

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

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

## MICH:

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

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

### [FDD - PRACH]:

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

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

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

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

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

### [FDD - AICH]:

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

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

#### [1.28Mcps TDD - FPACH]:

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

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

#### [1.28Mcps TDD - UpPCH]:

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

For a multi-frequency cell:

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

# [1.28Mcps TDD - PLCCH]:

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

#### General:

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

# 8.2.2.3 Unsuccessful Operation

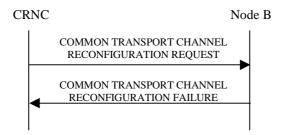


Figure 4: Common Transport Channel Reconfiguration procedure, Unsuccessful Operation

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

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

Typical cause values are as follows:

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

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

### **Transport Layer Cause:**

- Transport Resources Unavailable

#### **Miscellaneous Cause:**

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

## 8.2.2.4 Abnormal Conditions

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

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

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

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

shall reject the procedure by sending a COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE message.]

# 8.2.3 Common Transport Channel Deletion

#### 8.2.3.1 General

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

# 8.2.3.2 Successful Operation

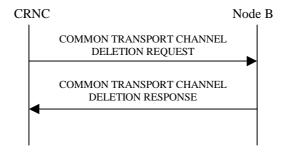


Figure 5: Common Transport Channel Deletion procedure, Successful Operation

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

#### **Secondary CCPCH:**

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

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

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

#### PRACH:

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

# [1.28Mcps TDD PLCCH:

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

### General:

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

After a successful procedure, the channels are deleted in the Node B. The channels in the COMMON TRANSPORT CHANNEL DELETION REQUEST message shall be set to state Not Existing ref. [6]. The Node B shall store the

received value of the *Configuration Generation ID* IE and respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

# 8.2.3.3 Unsuccessful Operation

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### 8.2.3.4 Abnormal Conditions

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

## 8.2.4 Block Resource

# 8.2.4.1 General

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

The logical resource that can be blocked is a cell.

# 8.2.4.2 Successful Operation

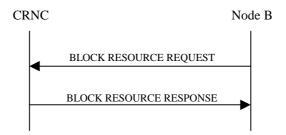


Figure 6: Block Resource procedure, Successful Operation

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

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

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

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

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

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

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

### Interactions with the Unblock Resource procedure:

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

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

# 8.2.4.3 Unsuccessful Operation

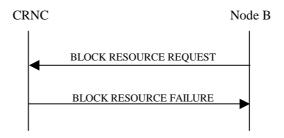


Figure 7: Block Resource procedure, Unsuccessful Operation

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

Typical cause values are as follows:

#### **Miscellaneous Cause:**

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

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

- Priority transport channel established

### 8.2.4.4 Abnormal Conditions

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# 8.2.5 Unblock Resource

# 8.2.5.1 General

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

The logical resource that can be unblocked is a cell.

# 8.2.5.2 Successful Operation



Figure 8: Unblock Resource procedure, Successful Operation

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

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

### 8.2.5.3 Abnormal Conditions

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# 8.2.6 Audit Required

#### 8.2.6.1 General

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

# 8.2.6.2 Successful Operation



Figure 9: Audit Required procedure, Successful Operation

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

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

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

### 8.2.6.3 Abnormal Conditions

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## 8.2.7 Audit

### 8.2.7.1 General

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

# 8.2.7.2 Successful Operation

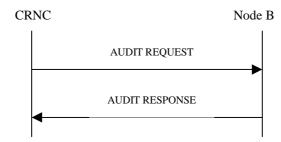


Figure 10: Audit procedure, Successful Operation

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

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

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

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

The Node B shall include one Local Cell Information IE for each local cell present in the Node B. The Node B shall include the Maximum DL Power Capability IE, the Minimum Spreading Factor IE and the Minimum DL Power Capability IE when any of those values are known by the Node B.The Node B shall include the HSDPA Capability IE set to "HSDPA Capable" and may include HS-DSCH MAC-d PDU Size Capability IE for every HSDPA-capable Local Cell. The Node B shall include the E-DCH Capability IE set to "E-DCH Capable" and may include E-DCH MAC-d PDU Size Capability IE for every E-DCH-capable Local Cell. The Node B shall include the MBMS Capability IE set to "MBMS Capable" for every MBMS-capable Local Cell. [FDD - The Node B shall include the F-DPCH Capability IE set to "F-DPCH Capable" for every F-DPCH-capable Local Cell.] [FDD - The Node B shall include the Continuous Packet Connectivity DTX-DRX Capability IE set to "Continuous Packet Connectivity DTX-DRX Capable" when Continuous Packet Connectivity DTX-DRX is supported for every Local Cell that is both HSDPA-capable and E-DCHcapable.] [FDD - The Node B shall include the Continuous Packet Connectivity HS-SCCH less Capability IE set to "Continuous Packet Connectivity HS-SCCH less Capable" when Continuous Packet Connectivity HS-SCCH less is supported for every Local Cell that is both HSDPA-capable and E-DCH-capable.] [FDD - The Node B shall include the MIMO Capability IE set to "MIMO Capable" for every MIMO-capable Local Cell.] [FDD - The Node B shall include the SixtyfourQAM DL Capability IE set to "SixtyfourQAM DL Capable" for every SixtyfourQAM DL-capable Local Cell.] [FDD - The Node B shall include the Enhanced FACH Capability IE set to "Enhanced FACH Capable" for every Enhanced FACH-capable Local Cell.] [FDD - The Node B shall include the SixteenQAM UL Capability IE set to "SixteenQAM UL Capable" for every SixteenQAM UL-capable Local Cell.] [1.28Mcps TDD - The Node B shall include the MBSFN Only Mode Capability IE set to "MBSFN Only Mode Capable" for every MBSFN Only Modecapable Local Cell.] [FDD - The Node B shall include the F-DPCH Slot Format Capability IE set to "F-DPCH Slot Format Capable" for every F-DPCH Slot Format-capable Local Cell.] [1.28Mcps TDD - The Node B shall include the SixtyfourQAM DL Capability IE set to "SixtyfourQAM DL Capable" for every SixtyfourQAM DL-capable Local Cell.]

[FDD - The Node B shall include the *Common E-DCH Capability* IE set to "Common E-DCH Capable" for every Common E-DCH capable Local Cell.] The Node B shall include the *E-DPCCH Power Boosting Capability* IE set to "E-DPCCH Power Boosting Capable" for every E-DPCCH Power Boosting -capable Local Cell. [FDD - The Node B shall include the *SixtyfourQAM DL and MIMO Combined Capability* IE set to "SixtyfourQAM DL and MIMO Combined Capable" for every SixtyfourQAM DL and MIMO Combined-Capable Local Cell.][1.28Mcps TDD - The Node B shall include the *Enhanced FACH Capability* IE set to "Enhanced FACH Capable" for every Enhanced FACH-capable Local Cell.] [1.28Mcps TDD - The Node B shall include the *Enhanced PCH Capability* IE set to "Enhanced PCH Capable" for every Enhanced PCH-capable Local Cell.] [1.28Mcps TDD - The Node B shall include the *Enhanced UE DRX Capability LCR* IE set to "Enhanced UE DRX Capable" for every Enhanced UE DRX Capable Local Cell.] [FDD - The Node B shall include the *Multi Cell Capability Info* IE and set the *Multi Cell Capability* IE value to "Multi Cell Capable" for every Multi Cell operation capable Local Cell, and if the cell can be the serving HS-DSCH then the possible cells (same sector) that can act as secondary serving HS-DSCH shall be listed in the *Possible Secondary Serving Cell List* IE.]

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

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

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

The Node B shall include, for each local cell present in the Node B, the Node B internal resource capability and consumption laws within the *Local Cell Information* IE [FDD - , including also the *E-DCH CapacityCconsumption Law*, if E-DCH is supported] [TDD - , including also the *E-DCH TDD Capacity Consumption Law* IE, if E-DCH is supported]. If the *UL Capacity Credit* IE is not present in the *Local Cell Information* IE, then the internal resource capabilities of the local cell are modelled as shared resources between Uplink and Downlink. If the Local Cell utilises Node B internal resource capabilities that are pooled for several Local Cell(s), the *Local Cell Group ID* IE shall contain the identity of the used Local Cell Group. If the Local Cell utilises Node B internal power resources that are pooled for several Local Cells, the *Power Local Cell Group ID* IE shall contain the identity of the concerned Power Local Cell Group.

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

- [1.28Mcps TDD The Node B may include the *UpPCH Information LCR* IE for each frequency on which the UpPCH channel is not configured in the timeslot of UpPTS.]
- [1.28Mcps TDD For a multi-frequency cell, the Node B may include the *UARFCN* IE in the *HS-DSCH Resources Information* IE to report the status of the HS-DSCH resources on the indicated frequency, the Node B may also not include any *UARFCN* IE in the *HS-DSCH Resources Information* IE to report the status of the HS-DSCH resources for the whole cell.]
- [1.28Mcps TDD For a multi-frequency cell, the Node B may include the *UARFCN* IE in the *E-DCH Resources Information* IE to report the status of the E-DCH resources on the indicated frequency, the Node B may also not include any *UARFCN* IE in the *E-DCH Resources Information* IE to report the status of the E-DCH resources for the whole cell.]

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

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

# 8.2.7.3 Unsuccessful Operation



Figure 10A: Audit procedure, Unsuccessful Operation

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

### 8.2.7.4 Abnormal Conditions

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

# 8.2.8 Common Measurement Initiation

### 8.2.8.1 General

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

# 8.2.8.2 Successful Operation

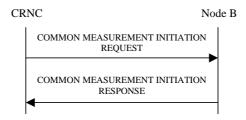


Figure 11: Common Measurement Initiation procedure, Successful Operation

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

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

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

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

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

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

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

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

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

[FDD - If the *Common Measurement Type* IE is set to "Received Scheduled E-DCH Power Share for Cell Portion" and the *RTWP\*for Cell Portion Reporting Indicator* IE is set to "RTWP\* Reporting Required", the *RTWP\* Value* IE shall be included in the COMMON MEASUREMENT REPORT message or in the COMMON MEASUREMENT RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand".]

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

## Common measurement type:

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

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

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

### **Report characteristics:**

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

If the *Report Characteristics* IE is set to "On Demand" and if the *SFN* IE is not provided, the Node B shall return the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the

measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

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

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

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

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

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

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

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

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

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

- 1. If the Common Measurement Type IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning":
  - If the  $T_{UTRAN-GPS}$  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<sub>n</sub>.

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

 $M_I$  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.

 $M_0$  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:

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

 $P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10*3.84*10^3*16 + P_{n-1}) \bmod 37158912000000 \qquad for n > 0$ 

$$F_n = min((M_n - P_n) \mod 37158912000000, (P_n - M_n) \mod 37158912000000)$$
 for  $n > 0$ 

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

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

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

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

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

 $M_1$  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.

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

- 2. If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference":
  - If the SFN-SFN Change Limit IE is included in the SFN-SFN Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F<sub>n</sub>). 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<sub>n</sub> rises above the threshold indicated by the SFN-SFN Change Limit IE. The change of the SFN-SFN value is calculated according to the following:

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

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

a is the last reported SFN-SFN.

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

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

- If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P<sub>n</sub> and F<sub>n</sub> 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<sub>n</sub> rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P<sub>n</sub> and F<sub>n</sub> are calculated according to the following:

```
P_{n}=b \ for \ n=0
[FDD - P_{n} = ((a/16) * ((SFN_{n} - SFN_{n-1}) \ mod \ 4096)/100 + P_{n-1}) \ mod \ 614400 \quad for \ n>0]
[FDD - F_{n} = min((M_{n} - P_{n}) \ mod \ 614400, (P_{n} - M_{n}) \ mod \ 614400) \quad for \ n>0]
[TDD - P_{n} = ((a/16) * (15*(SFN_{n} - SFN_{n-1})mod \ 4096 + (TS_{n} - TS_{n-1}))/1500 + P_{n-1}) \ mod \ 40960 \quad for \ n>0]
[TDD - F_{n} = min((M_{n} - P_{n}) \ mod \ 40960, (P_{n} - M_{n}) \ mod \ 40960) \quad for \ n>0]
```

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

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

b is the last reported SFN-SFN value.

abs denotes the absolute value.

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

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

 $M_I$  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 [25].

- 3. If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning":
  - If the  $T_{UTRAN-GANSS}$  Change Limit IE is included in the  $T_{UTRAN-GANSS}$  Measurement Threshold Information IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of  $T_{UTRAN-GANSS}$  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  $T_{UTRAN-GANSS}$  value ( $F_n$ ) is calculated according to the following:

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

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

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

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

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

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

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

- If the *Predicted T<sub>UTRAN-GANSS</sub> Deviation Limit* IE is included in the *T<sub>UTRAN-GANSS</sub> 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<sub>n</sub> and F<sub>n</sub>. The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when F<sub>n</sub> rises above the threshold indicated by the *Predicted T<sub>UTRAN-GANSS</sub> Deviation Limit* IE. The P<sub>n</sub> and F<sub>n</sub> are calculated according to the following:

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

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

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

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

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

b is the last reported T<sub>UTRAN-GANSS</sub> value.

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

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

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

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

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

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

#### **Higher 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  $M_1$  when the first measurement result from the physical layer measurement is received.

#### Common measurement accuracy:

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

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

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

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

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

#### **Measurement Recovery Behavior:**

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

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

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

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

## Response message:

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

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

If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference" and the Report Characteristics IE is set to "On Demand" or "On Modification", all the available measurement results shall be reported in the Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information IE in the SFN-SFN Measurement Value Information IE and the Node B shall indicate in the Unsuccessful Neighbouring Cell SFN-SFN Observed Time

Difference Measurement Information IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message. For all available measurement results, the Node B shall include in the Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information IE the SFN-SFN Quality IE and the SFN-SFN Drift Rate Quality IE, if available.

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

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

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

# 8.2.8.3 Unsuccessful Operation



Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

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

Typical cause values are as follows:

# **Radio Network Layer Cause:**

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

#### 8.2.8.4 Abnormal Conditions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

E-DCH Non- serving Relative Grant Down Commands	X	X	X	X			Х	Х	
Received Scheduled E-DCH Power Share	X	Х	Х	Х	Х	Х	Х	X	
[FDD - Received Scheduled E-DCH Power Share for Cell Portion]	Х	Х	X	Х	Х	Х	Х	Х	
UTRAN GANSS Timing of Cell Frames for UE Positioning	Х	X							X

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

# 8.2.9 Common Measurement Reporting

### 8.2.9.1 General

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

# 8.2.9.2 Successful Operation



Figure 13: Common Measurement Reporting procedure, Successful Operation

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

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

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

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

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

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

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

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

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

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

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

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

#### 8.2.9.3 Abnormal Conditions

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# 8.2.10 Common Measurement Termination

## 8.2.10.1 General

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

### 8.2.10.2 Successful Operation



Figure 14: Common Measurement Termination procedure, Successful Operation

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

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

### 8.2.10.3 Abnormal Conditions

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# 8.2.11 Common Measurement Failure

### 8.2.11.1 General

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

# 8.2.11.2 Successful Operation



Figure 15: Common Measurement Failure procedure, Successful Operation

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

#### 8.2.11.3 Abnormal Conditions

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# 8.2.12 Cell Setup

#### 8.2.12.1 General

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

# 8.2.12.2 Successful Operation

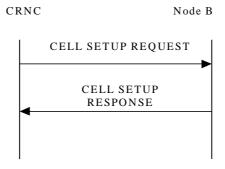


Figure 16: Cell Setup procedure, Successful Operation

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

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

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

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

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

# 8.2.12.3 Unsuccessful Operation

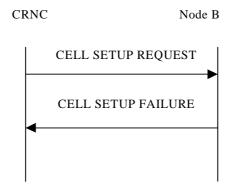


Figure 17: Cell Setup procedure: Unsuccessful Operation

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

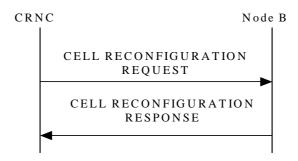


Figure 18: Cell Reconfiguration procedure, Successful Operation

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.]

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

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

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

[1.28Mcps TDD and 3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *PCCPCH Information* IE, the Node B shall reconfigure the P-CCPCH power in the cell according to the *PCCPCH Power* IE

value. The Node B shall adjust all the transmitted power levels relative to the Primary CCPCH power according to the new value.]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# 8.2.13.3 Unsuccessful Operation

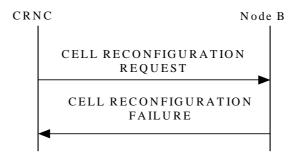


Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation

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

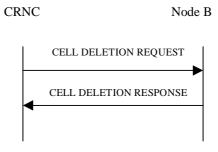


Figure 20: Cell Deletion procedure, Successful Operation

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 except the case that there is at least one FACH channel in this cell using the same transport bearer existing in other cell(s) in the Node B. In this case, the Node B shall remove the cell and any remaining common and dedicated channels within the cell but keep the common transport bearer which is used by the remaining common transport channel(s) in other cell(s).

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

# 8.2.14.3 Unsuccessful Operation

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#### 8.2.14.4 Abnormal Conditions

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

## 8.2.15 Resource Status Indication

### 8.2.15.1 General

This procedure is used in the following cases:

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

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

# 8.2.15.2 Successful Operation



Figure 21: Resource Status Indication procedure, Successful Operation

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

# **Local Cell Becomes Existing:**

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

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

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

If the Node B internal power resources are pooled for a group of Local Cells, the Node B shall include the *Power Local Cell Group ID* IE for the Local Cell. If the *Power Local Cell Group Information* IE has not already been reported in a

previous RESOURCE STATUS INDICATION message, the Node B shall include this IE for the concerned Power Local Cell Group in this message. Furthermore, the sum of the Maximum DL Power Capability of all the Local Cells belonging to the same Power Local Cell Group shall not exceed the Maximum DL Power Capability of the concerned Power Local Cell Group.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[FDD - If the Enhanced FACH capability has changed for the Local Cell, the new capability shall be indicated in the *Enhanced FACH Capability* IE. The Node B shall include the *Enhanced FACH Capability* IE if the Enhanced PCH capability has changed for the Enhanced PCH capable Local Cell.]

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

[1.28Mcps TDD - If the MBSFN Only Mode capability has changed for the Local Cell, the new capability shall be indicated in the MBSFN Only Mode Capability IE.]

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

[1.28Mcps TDD - If the SixtyfourQAM DL capability has changed for the Local Cell, then the new capability shall be indicated in the SixtyfourQAM DL Capability IE.]

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

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

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

[1.28Mcps TDD - If the Enhanced FACH capability has changed for the Local Cell, the new capability shall be indicated in the *Enhanced FACH Capability* IE. The Node B shall include the *Enhanced FACH Capability* IE if the Enhanced PCH capability has changed for the Enhanced PCH capable Local Cell.]

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

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

[FDD - If the Multi Cell Capability and/or the possible secondary serving cells has changed for the Local Cell, the new capability shall be indicated in the *Multi Cell Capability Info*.]

#### Capability Change of a Cell:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# Capability Change of a Power Local Cell Group:

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

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

#### General:

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

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

# 8.2.15.3 Abnormal Conditions

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# 8.2.16 System Information Update

### 8.2.16.1 General

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

# 8.2.16.2 Successful Operation

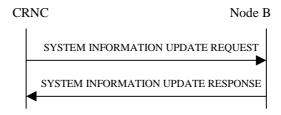


Figure 22: System Information Update procedure, Successful Operation

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **Information Block update:**

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

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

## 8.2.16.3 Unsuccessful Operation

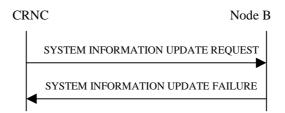


Figure 23: System Information Update procedure, Unsuccessful Operation

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

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

Typical cause values are:

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

- SIB Origination in Node B not Supported

#### **Miscellaneous Cause:**

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

#### 8.2.16.4 Abnormal Conditions

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

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

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

# 8.2.17 Radio Link Setup

#### 8.2.17.1 General

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

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

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

# 8.2.17.2 Successful Operation



Figure 24: Radio Link Setup procedure, Successful Operation

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

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

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

# **Transport Channels Handling:**

#### DCH(s):

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### [TDD - DSCH(s)]:

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

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

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

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

#### [TDD - USCH(s)]:

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

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

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

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

# **HS-DSCH:**

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

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

- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- The Node B shall include in the RADIO LINK SETUP RESPONSE message the Binding ID IE and Transport Layer Address IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.
- If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.
- If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK SETUP REQUEST message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK SETUP REQUEST in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the HS-SCCH Specific Information Response IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this

case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the Node B shall not include the *HARQ Preamble Mode Activation Indicator* IE in the RADIO LINK SETUP RESPONSE message.]

- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *HS-SICH SIR Target* IE in the *HS-DSCH Information* IE, the Node B shall use this value to determine the HS-SICH SIR Target. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK SETUP REQUEST message, then the Node B shall activate the resources that are allocated for the new serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the HS-DSCH MAC-d PDU Size
  Format IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B
  shall include the HS-DSCH TB Size Table Indicator IE in the RADIO LINK SETUP RESPONSE
  message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size
  signalling.]
- [FDD If the *UE without HS-SCCH constraint indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use a different HS-SCCH in consecutive TTIs for this UE.]
- [1.28Mcps TDD If the *TSN-Length* IE is included in the *HS-DSCH TDD Information* IE, then the IE is used to indicate the TSN bits applied to the MAC-hs PDU frame.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple carriers for the UE.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple carriers and include the HS-SCCH Specific Information Response LCR per UARFCN IE in the HS-DSCH TDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to apply HSDPA resources distributed over multiple carriers, the Node B may indicate the number of carriers actually used by the UE and include the

*Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UsedFrequency* IE in the *HS-SCCH Specific Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UARFCN* IE in the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the RADIO LINK SETUP RESPONSE message.]

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

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

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

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

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

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

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

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

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

- [FDD The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *RL specific E-DCH FDD Information* IE for an E-DCH MAC-d flow, then if the *Transport Bearer Not Requested Indicator* IE is not included for this E-DCH MAC-d flow, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for every E-DCH MAC-d flow being established for which the *Transport Bearer Not Requested Indicator* IE was not included.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for an E-DCH MAC-d flow, then the Node B shall not establish a transport bearer for the concerned E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for an E-DCH MAC-d flow and:]
  - [FDD if the Node B establishes a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the E-DCH MAC-d flow being established.]
  - [FDD if the Node B does not establish a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions for the related reordering queue.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK SETUP REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]

- [FDD If in the RADIO LINK SETUP REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" the Node B shall assume scheduled grants being configured for the concerned E-DCH MAC-d flow.]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD The Node B may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the Node B may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK SETUP RESPONSE message.]
  - [FDD The Node B may include the Serving Grant Value IE and Primary/Secondary Grant Selector IE in the RADIO LINK SETUP RESPONSE message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK SETUP RESPONSE message for the serving E-DCH RL.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH ReferencePower Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH

power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]

- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK SETUP REQUEST message, then the Node B shall activate the resources that are allocated for the new serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-RNTI* IE in the *E-DPCH Information* IE, the Node B shall use the information to detect the information related to the E-RNTI which is configured in the Node B when the UE was in Cell\_FACH state.]

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

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

#### [TDD - E-DCH]:

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

- [TDD The Node B shall setup the requested E-DCH resources on the Radio Link indicated by the *E-DCH Serving RL* IE.]
- [TDD If the *TNL QoS* IE is included in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flows Information TDD* IE, the Node B shall use this information for the related resource allocation operation.]
- [TDD If in the RADIO LINK SETUP REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Non-scheduled" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants are configured for that E-DCH MAC-d flow and shall use the information within the [3.84Mcps *E-DCH Non-scheduled Grant Information TDD* IE] [1.28Mcps *E-DCH Non-scheduled Grant Information LCR TDD* IE] [7.68Mcps *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE], if included, for the related resource allocation operation.]
- [TDD If in the RADIO LINK SETUP REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Scheduled" the Node B shall assume that it may issue scheduled grants for the concerned E-DCH MAC-d flow.]

- [TDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions for the related queue.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [3.84Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH TDD Maximum Bitrate* IE in the *E-DCH TDD Information* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH TDD Maximum Bitrate* 7.68Mcps IE in the *E-DCH TDD Information* 7.68Mcps IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the [3.84Mcps TDD *E-DCH TDD Information* IE] [7.68Mcps TDD *E-DCH TDD Information LCR* IE], then if the Node B could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE in the [3.84Mcps TDD *E-DCH TDD Information* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps* IE], then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE in the *E-DCH TDD Information LCR* IE, then the Node B shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [3.84Mcps TDD and 7.68Mcps TDD The Node B shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s), [1.28Mcps E-HICHs] assigned in the *E-DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

# **Physical Channels Handling:**

#### [FDD - Compressed Mode]:

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

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

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall 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 1*", the second to "*PhCH number 2*", and so on until the *pth* to "*PhCH number p*".]

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

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

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

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

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

#### General:

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

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

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

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

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

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

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

### [FDD - DPCH Handling]:

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

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

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

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

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

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

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

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

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

### [FDD - Transmit Diversity]:

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

# **DL Power Control:**

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

described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

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

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

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

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

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

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

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

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

[1.28 Mcps TDD - The Node B shall determine the minimum DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot* 

*Information LCR* IE, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

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

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

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

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

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

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

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

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

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

# [1.28Mcps TDD - Power Control GAP:]

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

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

[FDD – If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE the Node B shall if supported preconfigure the indicated cells for Enhanced HS Serving Cell Change according to [49]: ]

- [FDD The Node B shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK SETUP REQUEST message. The list of secondary serving HS-DSCH cells is designated by the list of *C-ID*s in the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK SETUP REQUEST message.]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified:]
  - [FDD - by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell]
  - [FDD - by the *Num Secondary HS-SCCH Codes* IE in the Secondary Cells IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells]
- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH C*odes IE is not included in the message "maxnoofHSSCCHcodes" shall be preconfigured. The total number of HS-SCCH Codes to be allocated has to satisfy any limitations in [10].]
- [FDD The Node B shall return these codes in the Sets of HS-SCCH Codes IE in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE of the RADIO LINK SETUP RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK SETUP FAILURE message.]
- [FDD The Node B shall use the first in the numbered list of the primary serving HS-DSCH cell"s HS-SCCH codes in the HS-SCCH Preconfigured Codes IE sent to the RNC to signal the Target Cell HS-SCCH Order defined in [18].
- [FDD The Node B shall include, in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE in the RADIO LINK SETUP RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK SETUP FAILURE message, IEs according to the rules defined for HS-DSCH Setup and: ]
  - [FDD - if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARO Preamble Mode Activation Indicator* IE]
  - [FDD - if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE ]
  - [FDD - if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used in the preconfigured configuration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell]
  - [FDD - if Sixtyfour QAM Usage Allowed Indicator is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE or in the *HS-DSCH Preconfiguration Setup* IE the *SixtyfourQAM DL Usage Indicator* IE for each preconfigured cell]
  - [FDD - if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE]
  - [FDD - if the UE without *HS-SCCH constraint indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the Node B shall store this information in the preconfigured configuration.]

[FDD – The Node B shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK SETUP FAILURE message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows: ]

- [FDD - The Node B may allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE. ]
- [FDD The Node B may configure for the preconfigured configuration the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]

#### General:

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

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

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

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

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

# [FDD - Radio Link Set Handling]:

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

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

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

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

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

#### **Response Message:**

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

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

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

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

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

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

# 8.2.17.3 Unsuccessful Operation



Figure 25: Radio Link Setup procedure, Unsuccessful Operation

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

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

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

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

Typical cause values are as follows:

#### Radio Network Layer Cause:

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported

- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- [FDD DPC mode change not supported]
- Delayed Activation not supported
- F-DPCH not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- E-DCH MAC-d PDU Size Format not available
- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]

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

- Transport Resources Unavailable

# **Miscellaneous Cause:**

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

# 8.2.17.4 Abnormal Conditions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[FDD - If the 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.]

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

- [FDD If the RADIO LINK SETUP REQUEST message includes one of the *Not Used* IEs, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *E-DCH RL Indication* IE set to "E-DCH", but does not contain the *E-DCH FDD Information* IE, or if the message contains the *E-DCH FDD Information* IE, but does not contain the *E-DCH RL Indication* IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- If the RADIO LINK SETUP REQUEST message contains the *HS-PDSCH RL ID* IE and the *Serving E-DCH RL* IE but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not configured to be in the same cell then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.
- [FDD If the RADIO LINK SETUP REQUEST message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as 'HS-DSCH not configured' then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *E-DPCH Information* IE but does not contain the *UL DPDCH Indicator For E-DCH Operation* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Serving Cell Change CFN* IE, but neither the *Serving E-DCH RL* IE nor *HS-DSCH Information* IE is included, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH, but does not contain the *Unidirectional DCH indicator* IE set to "Uplink DCH only" in the *DCH Specific Info* IE for the DCH, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [1.28Mcps TDD For a multi-frequency cell, if the *UARFCN* IE is not included in the RADIO LINK SETUP REQUEST message, the Node B shall reject the procedure by sending the RADIO LINK SETUP FAILURE message.]
- [1.28Mcps TDD For the cell in which only one frequency is configured, if the UARFCN IE is included in the RADIO LINK SETUP REQUEST message, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains the *UL DPCCH Slot Format* set to "4" but does not contain the *F-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains the *UL DPCCH Slot Format* set to "0" or "2" and the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains *Diversity Mode* IE set to "Closed loop mode 1" and *UL DPCCH Slot Format* not set to "2" or "3", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the MIMO Activation Indicator IE and/or Sixtyfour QAM Usage Allowed Indicator IE set to "Allowed", but does not contain the HS-DSCH MAC-d PDU Size Format IE set to "Flexible MAC-d PDU Size", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Setup* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but does not contain the *F-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Serving E-DCH RL ID* IE but contains the *Transport Bearer Not Requested Indicator* IE, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with RL which the transport bearer is configured to be established for the DCH, previously listed in the RADIO LINK SETUP RESPONSE message in the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

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

# 8.2.18 Physical Shared Channel Reconfiguration

### 8.2.18.1 General

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

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

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

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

## 8.2.18.2 Successful Operation

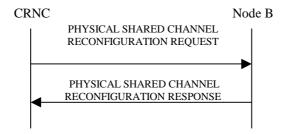


Figure 26: Physical Shared Channel Reconfiguration, Successful Operation

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

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

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

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

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

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

maximum transmission power of the cell portion, the Node B may use all unused power for HS-PDSCH, HS-SCCH and E-AGCH, E-RGCH and E-HICH codes.]

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

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

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

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

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

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

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

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

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

codes for HS-PDSCH channels on this frequency, the HSDPA resources on other frequency/frequencies shall remain unchanged.]

- [1.28Mcps TDD - If the *DL Timeslot and Code Information LCR per UARFCN* IE contains no *DL Timeslot and Code Information LCR* IE but contains *UARFCN* IE, the existing HS-PDSCH resources on the frequency indicated by the *UARFCN* IE shall be deleted, the HSDPA resources on other frequency/frequencies shall remain unchanged.]

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

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

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

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

[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 And E-DCH Cell Portion Information* IE, the Node B shall use this as the scrambling code for all HS-PDSCHs and HS-SCCHs for the cell portion indicated by Cell Portion ID. If a value has never been set, the Node B shall use the primary scrambling code for all HS-PDSCH and HS-SCCH codes for the cell portion indicated by Cell Portion ID.]

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

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

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

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

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

If the *HS-DSCH Common Information* IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:

- If the *Discard Timer* IE is included in the *Priority Queue Information for Enhanced FACH* IE, then the Node B shall use this information to discard out-of-date MAC-ehs SDUs from the related HSDPA Priority Queue.
- If the FACH Measurement Occasion Cycle Length Coefficient IE is included in the HS-DSCH Common Information IE, then the Node B shall use this information for MAC-hs scheduling decisions.
- The Node B shall allocate HS-SCCH codes and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH Common System Information Response* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.
- The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH Common System Information Response* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.

If the *Common MAC Flow Specific Information* IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:

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

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

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

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

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

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

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

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

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

If the *HS-DSCH Common Information LCR* IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:

- If the *Discard Timer* IE is included in the *Priority Queue Information for Enhanced FACH LCR* IE, then the Node B shall use this information to discard out-of-date MAC-ehs SDUs from the related HSDPA Priority Queue.
- If the FACH Measurement Occasion Cycle Length Coefficient IE is included in the HS-DSCH Common Information LCR IE, then the Node B shall use this information for MAC-hs scheduling decisions.
- The Node B shall allocate HS-SCCH codes and include the *HS-SCCH Specific Information Response LCR* IE in the *HS-DSCH Common System Information Response LCR* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.
- The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH Common System Information Response LCR* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.

If the *Common MAC Flow Specific Information LCR* IE is included, then the Node B shall apply the parameters to the enhanced FACH in new configuration:

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

- If the *Common MAC Flow Priority Queue Information LCR* IE is included in the *Common MAC Flow Specific Information LCR* IE, the Node B shall use the information for configuring HSDPA Priority Queues.]

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

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

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

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

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

## [FDD - E-DCH Resources]:

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

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

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

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

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

- [FDD - If the *E-RGCH/E-HICH FDD Code Information* IE contains one or more codes and E-RGCH/E-HICH resources are currently configured in the cell, replace the current list of codes with this new list of codes for E-RGCH/E-HICH channels.]

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

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

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Target Non-serving E-DCH to Total E-DCH Power Ratio* IE, the Node B shall store this value and use this value for E-DCH scheduling by controlling the ratio of received E-DCH wide band power from non-serving UEs to the total received E-DCH power.]

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

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

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

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

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

# [TDD - E-DCH Resources]:

[3.84Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-PUCH Information* IE, the Node B shall:

- If the *E-PUCH Information* IE contains no *E-PUCH Timeslot Information* IE, then the Node B shall delete any existing E-DCH resources from the cell.
- If the *E-PUCH Information* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are not currently configured in the cell, use this IE as the list of timeslots for E-PUCH channels.
- If the *E-PUCH Information* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are currently configured in the cell, replace the current list of timeslots with this new list of timeslots for E-PUCH channels.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-PUCH Information 1.28Mcps* IE, the Node B shall:

- If the *E-PUCH Information 1.28Mcps* IE contains no *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE, then the Node B shall delete any existing E-DCH resources from the cell.
- For a single-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are not currently configured in the cell, use this IE as the list of timeslots / codes for E-PUCH channels.
- For a single-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are currently configured in the cell, replace the current list of timeslots / codes with this new list of timeslots / codes for E-PUCH channels.
- For a multi-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are not currently configured on the indicated frequency in the cell, use this IE as the list of frequency / timeslots / codes for E-PUCH channels, the E-DCH resources on other frequency shall remain unchanged.
- For a multi-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE and E-DCH resources are currently configured on the indicated frequency in the cell, replace the current list of frequency / timeslots / codes with this new list of timeslots / codes for E-PUCH channels, the E-DCH resources on other frequency shall remain unchanged.
- For a multi-frequency cell, if the *E-PUCH Information 1.28Mcps* IE contains *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE but only *UARFCN* IE is included, then the Node B shall delete the existing E-DCH resources on the frequency indicated by the *UARFCN* IE from the cell, the E-DCH resources on other frequency shall remain unchanged.]

[7.68Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-PUCH Information 7.68Mcps* IE, the Node B shall:

- If the *E-PUCH Information 7.68Mcps* IE contains no *E-PUCH Timeslot Information* IE, then the Node B shall delete any existing E-DCH resources from the cell.
- If the *E-PUCH Information 7.68Mcps* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are not currently configured in the cell, use this IE as the list of timeslots for E-PUCH channels.
- If the *E-PUCH Information 7.68Mcps* IE contains *E-PUCH Timeslot Information* IE and E-DCH resources are currently configured in the cell, replace the current list of timeslots with this new list of timeslots for E-PUCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes [3.84Mcps TDD - *Add to E-AGCH Resource Pool 1.28Mcps* IE][7.68Mcps TDD - *Add to E-AGCH Resource Pool 7.68Mcps* IE], the Node B shall add this resource to the E-AGCH resource pool to be used to assign E-AGCH sets.]

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

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

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

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any [3.84Mcps TDD - *Modify E-AGCH Resource Pool IEs*] [1.28Mcps - *Modify E-AGCH Resource Pool 1.28Mcps* IEs][7.68Mcps TDD - *Modify E-AGCH Resource Pool 7.68Mcps* IEs]and includes the *Maximum E-AGCH Power* IE, the Node B shall apply this value for the specified E-AGCH code otherwise the old value is still applicable.]

- [TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from E-AGCH Resource Pool* IEs, the Node B shall delete these resources from the E-AGCH resource pool.]
- [3.84Mcps TDD and 7.68Mcps TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the [3.84Mcps TDD *E-HICH Information* IE] [7.68Mcps TDD *E-HICH Information* 7.68Mcps IE], the Node B shall configure the E-HICH according to the parameters.]
- [1.28Mcps TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Add to E-HICH Resource Pool 1.28Mcps* IE, the Node B shall add this resource to the E-HICH resource pool to be used to assign Scheduled or Non-scheduled E-HICH sets.]
- [1.28Mcps TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify E-HICH Resource Pool 1.28Mcps* IEs and includes any of *E-HICH Type* IE, *TDD Channelisation Code* IE, *Midamble Shift LCR* IE, *Time Slot LCR* IE, *UARFCN* IE for E-HICH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]
- [1.28Mcps TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify E-HICH Resource Pool 1.28Mcps* IEs and includes the *Maximum E-HICH Power* IE, the Node B shall apply this value for the specified E-HICH code otherwise the old value is still applicable.]
- [1.28Mcps TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from E-HICH Resource Pool 1.28Mcps* IEs, the Node B shall delete these resources from the E-HICH resource pool.]
- [3.84Mcps TDD and 7.68Mcps TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Maximum Generated Received Total Wide Band Power in Other Cells* IE, the Node B shall use this value to control E-DCH scheduling.]
- [1.28Mcps TDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Maximum Target Received Total Wide Band Power LCR* IE, the Node B shall use this value to control E-DCH scheduling.]

# [TDD - PDSCH/PUSCH Addition]:

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

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

#### [TDD - PDSCH/PUSCH Modification]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of [3.84Mcps TDD - *DL/UL Code Information IE, Midamble Shift And Burst Type IE, Time Slot IE*], [1.28Mcps TDD - *DL/UL Code Information LCR IE, Midamble Shift LCR IE, Time Slot LCR IE*], [7.68Mcps TDD - *DL/UL Code Information 7.68Mcps IE, Midamble Shift And Burst Type 7.68Mcps IE, Time Slot IE*], *TDD Physical Channel Offset IE, Repetition Period IE, Repetition Length IE*, or *TFCI Presence IE*, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

#### [TDD - PDSCH/PUSCH Deletion]:

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

#### [1.28Mcps TDD - SYNC\_UL Partition]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *SYNC\_UL Partition Information* IE, the Node B shall store the *E-RUCCH SYNC\_UL codes bitmap* IE used to differentiate the E-DCH random access from the RACH random access according to [21].]

# [FDD – Common E-DCH Operation]:

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

If the *Common E-DCH UL DPCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:

- If the *DPC Mode* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, the Node B shall apply the DPC mode indicated in the message and be prepared that the DPC mode may be changed. If the *DPC Mode* IE is not present in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, DPC mode 0 shall be applied (see ref. [10]).

If the *Common E-DCH E-DPCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:

- If the *E-RGCH 2-Index-Step* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, the Node B shall use the value when the new configuration is being used.
- If the *E-RGCH 3-Index-Step* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, the Node B shall use the value when the new configuration is being used.

If the *Common E-DCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:

- If the *E-DCH Reference Power Offset* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-i PDU and to determine the value of the actual HARQ power offset.
- If the *E-DCH Power Offset for Scheduling Info* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-is PDUs.
- If the *Maximum TB Sizes* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B may use this information for the Node B scheduler in the new configuration.

If the *Common E-DCH HS-DSCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.

If the *Common E-DCH Preamble Control Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:

- If the *E-AI Indicator* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall use this value for configuration of E-AIs on the AICH.
- If the *AICH Information* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall use this information for configuration of AICH.

If the *Common E-DCH F-DPCH Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.

If the *Common E-DCH Resource Combination Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:

- If the *E-RGCH Signature Sequence* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall configure the E-RGCH for the combination and use indicated signature sequence.

If the UL *Common MAC Flow Specific Information* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:

- If the *Transport Layer Address* IE and *Binding ID* IE are included in the UL *Common MAC Flow Specific Information* IE, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned UL Common MAC flow.

- If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.
- The Node B shall include in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE
  message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every UL
  Common MAC flow being established.
- If the *Bundling Mode Indicator* IE is included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the Common E-DCH UL data frames for the related UL Common MAC flow, otherwise the Node B shall use the non-bundling mode for the Common E-DCH UL data frames for the related UL Common MAC flow.
- If the *E-DCH MAC-d Flow Multiplexing List* IE is included for a Common E-DCH MAC-d flow in the *Common E-DCH MAC-d Flow Specific Information* IE, the Node B shall use this information for the related resource allocation operation.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to delete the indicated Common E-DCH MAC-d flows. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining Comm E-DCH MAC-d flows associated to a Common UL MAC flow, then the Node B shall release the resources for the Common UL MAC flow.]

#### [1.28Mcps TDD – Common E-DCH Operation]:

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

If the *UL Common MAC Flow Specific Information LCR* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration:

- If the Transport Layer Address IE and Binding ID IE are included in the UL Common MAC Flow Specific
  Information IE, then the Node B may use the transport layer address and the binding identifier received from the
  CRNC when establishing a transport bearer for the concerned UL Common MAC flow.
- If the TNL QoS IE is included and if ALCAP is not used, the TNL QoS IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related transport bearer.
- The Node B shall include in the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message the Binding ID IE and Transport Layer Address IE for establishment of transport bearer for every UL Common MAC flow being established.
- If the *E-DCH MAC-d Flow Multiplexing List* IE is included for a Common E-DCH MAC-d flow in the *Common E-DCH MAC-d Flow Specific Information LCR* IE, the Node B shall use this information for the related resource allocation operation.]

If the *Common E-PUCH Information LCR* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.

If the *E-TFCS Information TDD* IE is included, then the Node B shall apply the parameters to the common E-DCH in new configuration.

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common E-DCH MAC-d Flows To Delete LCR* IEs, then the Node B shall use this information to delete the indicated Common E-DCH MAC-d flows. If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Common UL MAC Flows to Delete LCR* IE requesting the deletion of all remaining Comm E-DCH MAC-d flows associated to a Common UL MAC flow, then the Node B shall release the resources for the Common UL MAC flow.]

#### [FDD - Enhanced UE DRX Operation]:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Enhanced UE DRX Information* IE, then the Node B shall use the information to execute Enhanced UE DRX for the cell.]

#### [1.28Mcps DD – Enhanced UE DRX Operation]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes the *Enhanced UE DRX Information LCR* IE, then the Node B shall use the information to execute Enhanced UE DRX for the cell.]

#### Response Message:

# **HS-DSCH/HS-SCCH Resources:**

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

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

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

### 8.2.18.3 Unsuccessful Operation

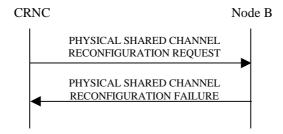


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Opreration

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

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

[1.28Mcps TDD - For a multi-frequency cell, if the Node B is not able to support all parts of the configuration, in the case the Node B can only support configuration on one or some frequencies, the HSDPA or E-DCH related resources on this or these frequencies may be regarded as having successfully been established/reconfigured/removed, the Node B shall reject the HSDPA or E-DCH related configuration on other failed frequencies. The Node B may respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message. The *HS-Cause* IE or *E-Cause* IE in the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message may be set to specific cause values for each frequency that caused a HSDPA or E-DCH related configuration failure. If the failure occurs on the HS-PDSCH, HS-SCCH, E-PUCH or E-AGCH resources, the Node B may store the value of the *Configuration Generation ID* IE and it shall make these resources available to all the current and future HS-DSCH or E-DCH transport channels. If the Node B is not able to support the HSDPA or E-DCH related configuration on any frequencies, the *Cause* IE may be set to an appropriate value, which is either a general cause value or specific cause values for each frequency that caused a failure.]

Typical cause values are as follows:

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

- Cell not available

Node B Resources unavailable

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

- Transport Resources Unavailable

#### **Miscellaneous Cause:**

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

#### 8.2.18.4 Abnormal Conditions

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

[3.84Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *Add to E-AGCH Resource Pool* IE, the *Modify E-AGCH Resource Pool* IE, or the *Delete from E-AGCH Resource Pool* IE and does not contain the *Configuration Generation ID* the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Add to E-AGCH Resource Pool 1.28Mcps IE, the Modify E-AGCH Resource Pool 1.28Mcps IE, or the Delete from E-AGCH Resource Pool IE and does not contain the Configuration Generation ID the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Add to E-HICH Resource Pool 1.28Mcps IE, the Modify E-HICH Resource Pool 1.28Mcps IE, or the Delete from E-HICH Resource Pool 1.28Mcps IE and does not contain the Configuration Generation ID the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[7.68Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Add to E-AGCH Resource Pool 7.68Mcps IE, the Modify E-AGCH Resource Pool 7.68Mcps IE, or the Delete from E-AGCH Resource Pool IE and does not contain the Configuration Generation ID the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the Configuration Generation ID IE and does not contain at least one of Add to HS-SCCH Resource Pool IE, the Modify HS-SCCH Resource Pool IE, [3.84Mcps TDD - the Add to E-AGCH Resource Pool IE, the Modify E-AGCH Resource Pool IE, the Delete from E-AGCH Resource Pool I.28Mcps IE, the Modify E-AGCH Resource Pool 1.28Mcps IE, the Delete from E-AGCH Resource Pool IE, the Add to E-HICH Resource Pool 1.28Mcps IE, the Modify E-HICH Resource Pool 1.28Mcps IE, the Delete from E-HICH Resource Pool 1.28Mcps IE, the Modify E-AGCH Resource Pool 1.28Mcps IE, the Modify E-AGCH Resource Pool 1.28Mcps IE, the Modify E-AGCH Resource Pool 7.68Mcps IE, the Delete from E-AGCH Resource Pool 7.68Mcps IE, the Delete from E-AGCH Resource Pool IE,] or the Delete from HS-SCCH Resource Pool IE the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[FDD - If neither E-AGCH nor E-HICH/E-RGCH resources are configured in the cell, and if one or more codes are included in the *E-AGCH FDD Code Information* IE and/or *E-RGCH/E-HICH FDD Code Information* IE but the *Maximum Target Received Total Wide Band Power* IE is not included in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, then the Node B shall send PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE, and the E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE is not

identical to the scrambling code of the phase reference, then the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]

- [FDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE in the *HSDPA And E-DCH Cell Portion Information* IE, and the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE is not identical to the scrambling code of the phase reference, then the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]
- [FDD If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-DSCH Common Information* IE and/or *Common MAC Flow Specific Information* IE and if the Priority Queues associated with the same *Common MAC Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *DL Timeslot and Code Information LCR per UARFCN* IE in the *HS-PDSCH TDD Information* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *HS-SCCH Information LCR* IE in the *Add to HS-SCCH Resource Pool* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *UARFCN* IE in the *HS-SCCH Information LCR* IE in the *Modify HS-SCCH Resource Pool* IE, the HS-SCCH information on the new frequency shall be provided, otherwise the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *UARFCN* IE in the *E-AGCH Information 1.28Mcps* IE in the *Modify E-AGCH Resource Pool 1.28Mcps* IE, the E-AGCH information on the new frequency shall be provided, otherwise the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message contains the *UARFCN* IE in the *E-HICH Information 1.28Mcps* IE in the *Modify E-HICH Resource Pool 1.28Mcps* IE, the E-HICH information on the new frequency shall be provided, otherwise the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *DL Timeslot and Code Information LCR* IE in the *DL Timeslot and Code Information LCR* IE in the *DL Timeslot and Code Information LCR per UARFCN* IE in the *HS-PDSCH TDD Information* IE but contains *UARFCN* IE, and no HS-DSCH resources are configured on the frequency within the cell, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *E-PUCH Timeslot Information 1.28Mcps per UARFCN* IE in the *E-PUCH Information 1.28Mcps* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *Add to E-AGCH Resource Pool 1.28Mcps* IE, the *Modify E-AGCH Resource Pool 1.28Mcps* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]
- [1.28Mcps TDD For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *UARFCN* IE in the *Add to E-HICH Resource Pool 1.28Mcps* IE, the *Modify E-HICH Resource Pool 1.28Mcps* IE, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

[1.28Mcps TDD - For a multi-frequency cell, if the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message does not contain the *E-PUCH Timeslot Information 1.28Mcps* IE in the *E-PUCH Timeslot Information 1.28Mcps* IE but contains *UARFCN* IE, and no E-DCH resources are configured on the frequency within the cell, the Node B shall consider the procedure as having failed and shall send the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message to the CRNC.]

### 8.2.19 Reset

#### 8.2.19.1 General

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

# 8.2.19.2 Successful Operation

### 8.2.19.2.1 Reset Initiated by the CRNC

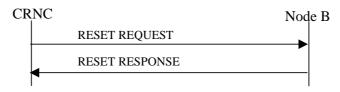


Figure 27A Reset procedure (CRNC to Node B), Successful Operation

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

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

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

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

#### 8.2.19.2.2 Reset Initiated by the Node B

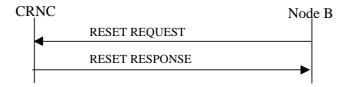


Figure 27B Reset procedure (Node B to CRNC), Successful Operation

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

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

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

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

# 8.2.19.3 Unsuccessful Operation

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#### 8.2.19.4 Abnormal Conditions

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

# 8.2.20 Cell Synchronisation Initiation [TDD]

# 8.2.20.1 General

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

# 8.2.20.2 Successful Operation

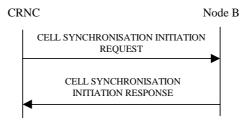


Figure 27C Cell Synchronisation Initiation procedure, Successful Operation

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

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

# [3.84Mcps 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

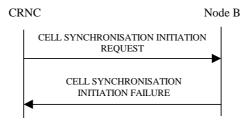


Figure 27D Cell Synchronisation Initiation procedure, Unsuccessful Operation

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

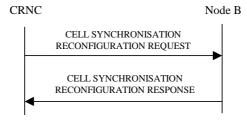


Figure 27E Cell Synchronisation Reconfiguration procedure, Successful Operation

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

 $SFN = floor((k\text{-}1) * Cycle \ length + (j\text{-}1)* Subcycle \ length + (i\text{-}1)* \ Repetition \ period)$ 

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

 $j = \{1, 2, 3, ...$  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

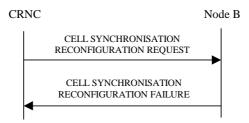


Figure 27F Cell Synchronisation Reconfiguration procedure, Unsuccessful Operation

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

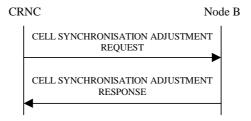


Figure 27J Cell Synchronisation Adjustment, Successful Operation

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

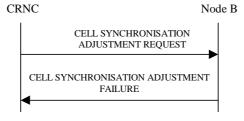


Figure 27K Cell Synchronisation Adjustment, Unsuccessful Operation

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

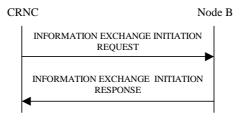


Figure 27L: Information Exchange Initiation procedure, Successful Operation

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.

If the Information Type IE contains a GANSS Generic Data IE, at least one of the GANSS Navigation Model And Time Recovery, GANSS Time Model GNSS-GNSS, GANSS UTC Model, GANSS Almanac, GANSS Real Time Integrity, GANSS Data Bit Assistance, GANSS Additional Navigation Models And Time Recovery, GANSS Additional UTC Models, GANSS Auxiliary Information IEs shall be present in the GANSS Generic Data IE.

- If the *GANSS Generic Data* IE does not contain the *GANSS ID* IE, the Node B shall assume that the corresponding GANSS is "Galileo".

#### **Information Report Characteristics**

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

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

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

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

- 1) If the *Information Type Item* IE is set to "DGPS Corrections", the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE in the *Information Threshold* IE or a change has occurred in the IODE.
- 2) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Navigation Model & Time Recovery", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *Sat ID* IEs.
- 3) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Ionospheric Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 4) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS UTC Model", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the t<sub>ot</sub> or WN<sub>t</sub> parameter.
- 5) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change in the t<sub>oa</sub> or WN<sub>a</sub> parameter has occurred.
- 6) If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 7) If the *Information Type Item* IE is set to "DGANSS Corrections", the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE in the *Information Threshold* IE or a change has occurred in the IOD.
- 8) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Navigation Model And Time Recovery* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred regarding either the IOD or the list of visible satellites, identified by the *Sat ID* IEs.
- 9) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Ionospheric Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- 10) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- 11) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS UTC Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>ot</sub> or WN<sub>t</sub> parameter.
- 12) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Almanac* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change in the T<sub>oa</sub>, IOD<sub>a</sub> or Week Number parameter has occurred.
- 13) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Real Time Integrity* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred
- 14) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Data Bit Assistance* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- 15)If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional Navigation Models And Time Recovery* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred regarding either the IOD or the list of visible satellites, identified by the *Sat ID* IEs.

- 16) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional Ionospheric Model* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- 17) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional UTC Models* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>ot</sub>, WN<sub>ot</sub>, WN<sub>t</sub>, or N<sup>A</sup> parameter.
- 18) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Earth Orientation Parameters* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>EOP</sub> parameter.
- 19) If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Auxiliary Information* IE, the Node B shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the *Signals Available* or *Channel Number* IE parameter.
- 20) If any of the above *Information Type* IEs becomes temporarily unavailable, the Node B shall initiate the Information Reporting procedure for this specific Information Item by indicating "Information Not Available" in the *Requested Data Value Information* IE. If the Information becomes available again, the Node B shall initiate the Information Reporting procedure for this specific Information.

#### Response message

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

If the Requested DataValue IE contains the GANSS Common Data IE, at least one of the GANSS Ionospheric Model, GANSS RX Pos, GANSS Additional Ionospheric Model, or GANSS Earth Orientation Parameters IEs shall be present.

Any GANSS Generic Data IE associated with a given GANSS included in the Requested DataValue IE shall contain at least one of the DGANSS Corrections, GANSS Navigation Model And Time Recovery, GANSS Time Model, GANSS UTC Model, GANSS Almanac, GANSS Real Time Integrity, GANSS Data Bit Assistance, GANSS Additional Time Models, GANSS Additional Navigation Models And Time Recovery, GANSS Additional UTC Models, or GANSS Auxiliary Information IEs.

- If the GANSS Generic Data IE does not contain the GANSS ID IE, the corresponding GANSS is "Galileo".
- The *DGANSS Corrections* IE contains one or several *DGANSS Information* IE(s), each of them associated with a GANSS Signal. A *DGANSS Information* IE for a particular GANSS that does not contain the *GANSS Signal ID* IE is by default associated with the default signal defined in [18], clause 10.3.3.45a.
- The *GANSS Real Time Integrity* IE contains one or several *Satellite Information* IEs, each of them associated with a satellite and a GANSS Signal. A *Satellite Information* IE for a particular GANSS that does not contain the *Bad GANSS Signal ID* IE is by default associated with all the signals of the corresponding satellite (see [39, 43, 44, 45, 46, 47 48]).

If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model GNSS-GNSS* IE with exactly one bit set to value "1", the Node B shall include the *GANSS Time Model* IE in the *Requested Data Value* IE with the requested time information.

If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model GNSS-GNSS* IE with more than one bit set to value "1, the Node B shall include the *GANSS Additional Time Models* IE in *Requested Data Value* IE with the requested time information for each GANSS.

# 8.2.26.3 Unsuccessful Operation



Figure 27M: Information Exchange Initiation procedure, Unsuccessful Operation

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

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

Typical cause values are as follows:

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

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

#### 8.2.26.4 Abnormal Conditions

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

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

# 8.2.27 Information Reporting

# 8.2.27.1 General

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

# 8.2.27.2 Successful Operation



Figure 27N: Information Reporting procedure, Successful Operation

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

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

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

#### 8.2.27.3 Abnormal Conditions

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# 8.2.28 Information Exchange Termination

#### 8.2.28.1 General

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

# 8.2.28.2 Successful Operation



Figure 270: Information Exchange Termination procedure, Successful Operation

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

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

#### 8.2.28.3 Abnormal Conditions

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# 8.2.29 Information Exchange Failure

#### 8.2.29.1 General

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

# 8.2.29.2 Successful Operation



Figure 27P: Information Exchange Failure procedure, Successful Operation

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

# 8.2.30 MBMS Notification Update

#### 8.2.30.1 General

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

# 8.2.30.2 Successful Operation



Figure 27Q: MBMS Notification Update procedure, Successful Operation

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

The Node B shall use the different NIs in the *NI Information* IE to generate, as specified in ref. [7], the notification indicators it shall transmit on the MICH starting at the next coming MICH CFN equal to the value in the *MICH CFN* IE and for a duration equal to the Modification Period. If the value of *MICH CFN* IE is the same as the one in a previously received MBMS NOTIFICATION UPDATE COMMAND message, and if the MICH CFN occurrence has not been reached yet, the Node B shall overwrite the value of the *NI Information* IE in the previously received MBMS NOTIFICATION UPDATE COMMAND message.

If the *Modification Period* IE is included in the MBMS NOTIFICATION UPDATE COMMAND message, the Node B shall use this as the new Modification Period starting at the next coming MICH CFN equal to the value in the *MICH CFN* IE. If the value of *MICH CFN* IE is the same as the one in a previously received MBMS NOTIFICATION UPDATE COMMAND message, and if the MICH CFN occurrence has not been reached yet, the Node B shall overwrite the value of the *Modification Period* IE in the previously received MBMS NOTIFICATION UPDATE COMMAND message.

If the *Modification Period* IE is not included in the MBMS NOTIFICATION UPDATE COMMAND message, the Node B shall use the lastest stored Modification Period.

#### 8.2.30.3 Abnormal Conditions

If the *Modification Period* IE is not included in the MBMS NOTIFICATION UPDATE COMMAND message and no Modification Period is stored in the Node B, the Node B shall initiate the Error Indication procedure.

# 8.2.31 UE Status Update [FDD and 1.28Mcps TDD]

# 8.2.31.1 General

This procedure is used by the CRNC to inform NodeB that one or several E-RNTIs, previously allocated to UEs in CELL\_FACH state, may be released as the UE no longer use the E-RNTI.

# 8.2.31.2 Successful Operation



Figure 27R: UE Status Update procedure, Successful Operation

The procedure is initiated with a UE STATUS UPDATE COMMAND message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception of the UE STATUS UPDATE COMMAND message, the Node B may use the information about vacant E-RNTI in *Vacant E-RNTI* IE in *Cell E-RNTI status information* IE to determine which E-RNTIs are no longer used in the cell and thus allowed to be allocated to another UE using E-DCH

#### 8.2.31.3 Abnormal Conditions

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# 8.3 NBAP Dedicated Procedures

# 8.3.1 Radio Link Addition

## 8.3.1.1 General

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

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

# 8.3.1.2 Successful Operation

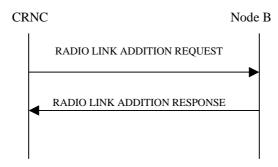


Figure: 28 Radio Link Addition procedure, Successful Operation

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

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

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

#### **Physical Channels Handling:**

[TDD - If the [3.84Mcps TDD - *UL DPCH Information IE*] [1.28Mcps TDD - *UL DPCH Information LCR* IE] [7.68Mcps TDD - *UL DPCH Information 7.68Mcps* IE] is present, the Node B shall configure the new UL DPCH(s) according to the parameters given in the message.]

[TDD - If the [3.84Mcps TDD - *DL DPCH Information IE*] [1.28Mcps TDD - *DL DPCH Information LCR* IE] [7.68Mcps TDD - *DL DPCH Information 7.68Mcps* IE] is present, the Node B shall configure the new DL DPCH(s) according to the parameters given in the message.]

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

### [FDD - Compressed Mode]:

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

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

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

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

#### [TDD - CCTrCH Handling]:

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

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

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

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

[1.28 Mcps TDD - The Node B shall configure the HS-SCCH TPC step size to the same value as the *TDD TPC DL Step Size* IE of the lowest numbered DL CCTrCH whose *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE. If no *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE, it shall use the step size configured in other radio link.]

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

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

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

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

[FDD - The signalled *Diversity Control Field* IE is only applicable for DCHs. In case of E-DCH, if any UARFCN(s) of the cells in the added RL(s) is not equal to at least one of the UARFCN(s) of the cells in the existing RL(s) in the Node B Communication Context, the Diversity Control Field, for those RL(s) shall be assumed to be set to "May", otherwise it shall be assumed to be set to "Must".]

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

In the case of not combining a RL with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or a RL previously listed in the RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that no combining is done. In this case, the Node B shall:

- include in the DCH Information Response IE both the Transport Layer Address IE and the Binding ID IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message. [FDD for which the Transport Bearer Not Requested Indicator IE was not included].
- [FDD include in the RADIO LINK ADDITION RESPONSE message the *Transport Bearer Not Setup Indicator* IE for every DCH for which establishment of a transport bearer has not taken place as a result of information in the *Transport Bearer Not Requested Indicator* IE in the RADIO LINK ADDITION REQUEST message.]
- [FDD For E-DCH, include in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearers to be established for each E-DCH MAC-d flow of this RL for which the *Transport Bearer Not Requested Indicator* IE was not included.]

In the case of combining with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that the RL is combined and if the ALCAP is not used [FDD - and the transport bearer for this DCH is already established], the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL in the RADIO LINK ADDITION REQUEST message, shall not be used. In this case, the *RL ID* IE indicates (one of) the previously established RL(s) or a RL previously listed in this RADIO LINK ADDITION RESPONSE message with which the new RL is combined.

[FDD - In the case of combining with an E-DCH RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, one of the previously established RLs or a RL previously listed in this RADIO LINK ADDITION RESPONSE message including the *E-DCH FDD Information Response* IE shall be regarded as the RL with which the concerned E-DCH RL is combined. In case E-DCH RL is established for the first time, the Node B shall include *E-DCH FDD Information Response* IE instead of using the Diversity Indication of DCH RL in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message. It shall include in the *E-DCH FDD Information Response* IE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearers to be established for each E-DCH MAC-d flow of this E-DCH RL for which the *Transport Bearer Not Requested Indicator* IE was not included.]

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

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

#### [FDD - Transmit Diversity]:

[FDD - If the *Transmit Diversity Indicator* IE 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 and 7.68Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]

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

Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

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

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

[3.84 Mcps TDD and 7.68Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall determine the maximum CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum CCTrCH DL power, otherwise the maximum CCTrCH DL power is the *Maximum DL Power* IE included in the *RL Information* IE. If no *Maximum DL Power* IE is included (even if *CCTrCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

[3.84 Mcps TDD and 7.68Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall determine the minimum CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum CCTrCH DL power, otherwise the minimum CCTrCH DL power is the *Minimum DL Power* IE included in the *RL Information* IE. If no *Minimum DL Power* IE is included (even if *CCTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

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

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

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

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

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

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

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

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

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

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

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

# [1.28Mcps TDD - Power Control GAP:]

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE the Node B shall if supported preconfigure the indicated cells or Enhanced HS Serving Cell Change according to [49.]: ]

- [FDD The Node B shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK ADDITION REQUEST message. The list of secondary serving HS-DSCH cells is designated by the list of *Secondary C-ID*s in the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK ADDITION REQUEST message.]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified:]
  - [FDD - by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell]
  - [FDD - by the *Num Secondary HS-SCCH Codes* IE in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells]
- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message "maxnoofHSSCCHcodes" shall be preconfigured. The total number of HS-SCCH Codes to be allocated has to satisfy any limitations in [10]. ]
- [FDD The Node B shall return these codes in the Sets of HS-SCCH Codes IE in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE of the RADIO LINK ADDITION RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK ADDITION FAILURE message.]
- [FDD The Node B shall use the first in the numbered list of the primary serving HS-DSCH cell"s HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the RNC to signal the Target Cell HS-SCCH Order defined in [18]. ]
- [FDD The Node B shall include, in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK ADDITION FAILURE message, IEs according to the rules defined for HS-DSCH Setup at Serving HS-DSCH Radio Link Change and: ]
  - [FDD - if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARQ Preamble Mode Activation Indicator* IE]
  - [FDD - if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE ]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used for the cell in the preconfigured configuration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell]
  - [FDD - if Sixtyfour QAM Usage Allowed Indicator is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell]
  - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE]
  - [FDD If the UE without HS-SCCH constraint indicator IE is included in the HS-DSCH Preconfiguration Setup IE, then the Node B shall store this information in the preconfigured configuration.]

- [FDD The Node B shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK ADDITION FAILURE message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows: ]
  - [FDD The Node B may allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE. ]
  - [FDD The Node B may configure for the preconfigured configuration the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]

#### General:

If the RADIO LINK ADDITION REQUEST message includes the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included].

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

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

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

If the RADIO LINK ADDITION REQUEST message includes the *RL Specific E-DCH Information* IE, the Node B may use the transport layer addresses and the binding identifiers received from the CRNC when establishing transport bearers for the MAC-d flows of the E-DCHs.

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

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

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Synchronisation Indicator* IE, set to "Timing Maintained Synchronisation", the Node B shall use synchronisation procedure B according to subclause 4.3.2.4 in [10]. The Node B shall select the TPC pattern as if "first RLS indicator" is set to "first RLS" according to subclause 5.1.2.2.1.2 in [10].]

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

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

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

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

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

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

# [FDD - Serving HS-DSCH Radio Link Change]:

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Serving Cell Change Information* IE, then *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD In the new configuration the Node B shall allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.]
- [FDD The Node B may include the *HARQ Memory Partitioning* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the HS-SCCH Specific Information Response IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]

# [FDD - HS-DSCH Setup at Serving HS-DSCH Radio Link Change:]

[FDD - If the *HS-DSCH Information* IE is present in the *HS-DSCH Serving Cell Change Information* IE, then:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.]
- [FDD The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.]

- [FDD The Node B shall include the HS-DSCH Initial Capacity Allocation IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK ADDITION REQUEST message includes HS-DSCH MAC-d PDU Size Format IE in the HS-DSCH Information IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the HS-DSCH Initial Capacity Allocation IE the values for the peer of Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer received in RADIO LINK ADDITION REQUEST in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH Information IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the HS-SCCH Specific Information Response IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the HARQ Preamble Mode IE in the HS-DSCH Information IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK ADDITION RESPONSE message. If the HARQ Preamble Mode IE is not included or if the mode 0 is applied, then the Node B shall not include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].]
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [FDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE without HS-SCCH constraint indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use a different HS-SCCH in consecutive TTIs for this UE.]

- [FDD If the *Serving Cell Change CFN* IE is included into the RADIO LINK ADDITION REQUEST message, then the Node B shall activate the resources that are allocated for the new serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC. In the new configuration the Node B shall, if applicable, de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link. The Node B shall deactivate those resources at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the Serving Cell Change CFN IE is not included then the Node B shall activate immediately the resources that are allocated for the new serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous serving HS-PDSCH Radio Link.]
- [FDD If the Serving Cell Change CFN IE is not included into the RADIO LINK ADDITION REQUEST message, then the Node B shall include the Transport Layer Address IE and the Binding ID IE for HS-DSCH MAC-d flow for the serving HS-PDSCH RL into the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *HS-DSCH Information* IE is present in the *HS-DSCH Serving Cell Change Information* IE, then the Node B shall include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow for the serving HS-PDSCH RL into the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Node B needs a bearer re-arrangement, then the Node B may include the *Transport Layer Address*IE and the *Binding ID* IE for HS-DSCH MAC-d flow for the serving HS-PDSCH RL into the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If a reset of the MAC-hs is not required the Node B shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the requested Serving HS-DSCH Radio Link Change was successful or unsucessful, the Node B shall indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the HS-DSCH Serving Cell Change Information IE includes the Continuous Packet Connectivity HS-SCCH less Information IE, then:]
  - [FDD The Node B shall configure the new Serving HS-DSCH Radio Link for Continuous Packet Connectivity HS-SCCH less operation according to [10].]
  - [FDD The Node B shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the Continuous Packet Connectivity HS-SCCH less Information Response IE in the HS-DSCH Serving Cell Change Information Response IE.]
- [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the Node B shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK ADDITION RESPONSE message.]

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

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Additional HS Cell Information RL Addition* IE, then *HS-PDSCH RL ID* IE indicates the new secondary serving HS-DSCH Radio Link:]

- [FDD In the new configuration the Node B shall allocate the HS-PDSCH resources for the new Secondary Serving HS-PDSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the HS-SCCH Specific Secondary Serving Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message.]

#### [FDD - Secondary Serving HS-DSCH Setup at Secondary Serving HS-DSCH Radio Link Change:]

[FDD - If the *C-ID* IE is present in the *Additional HS Cell Information RL Addition* IE, then:]

FDD - The Node B shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE. Non cell specific secondary serving Radio

Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and include the HS-SCCH Specific Secondary Serving Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *Serving Cell Change CFN* IE is included into the RADIO LINK ADDITION REQUEST message, then the Node B shall activate the resources that are allocated for the new secondary serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC. In the new configuration the Node B shall, if applicable, de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link. The Node B shall deactivate those resources at the next coming CFN with a value equal to the value requested by the RNC.]
- [FDD If the Serving Cell Change CFN IE is not included then the Node B shall activate immediately the resources that are allocated for the new serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous serving HS-PDSCH Radio Link.]
- [FDD If the requested Secondary Serving HS-DSCH Radio Link Change was successful or unsucessful, the Node B shall indicate this in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

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

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

- [FDD The Node B shall setup the E-DCH resources as configured in the Node B Communication Context.]
- [FDD The Node B may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the Node B may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in *RL Information Response* IE for every RL indicated by the *E-DCH RL Indication* IE, set to 'E-DCH' in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]

- [FDD - If the RADIO LINK ADDITION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]

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

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

- [FDD If the new Serving E-DCH RL is in this Node B:]
  - [FDD The Node B may allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK ADDITION RESPONSE message for the new serving E-DCH RL.]
- [FDD The Node B may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for any of the other E-DCH Radio Links in the Node B Communication Context that have not been included in the *E-DCH FDD DL Control Channel Information* IE in *RL Information Response* IE.]
- [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK ADDITION REQUEST message, then the Node B shall activate the resources that are allocated for the new serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the RNC. In the new configuration the Node B shall, if applicable, de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link. The Node B shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD If the *Serving Cell Change CFN* IE is not included then the Node B shall activate immediately the resources that are allocated for the new serving E-DCH Radio Link.]
- [FDD If the addition of the requested Serving E-DCH Radio Link was successful but the Serving E-DCH Radio Link change was unsuccessful, the Node B shall indicate this in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

#### [FDD - E-DPCH Handling]:

[FDD - If the RADIO LINK ADDITION REQUEST message includes an *E-DPCH Information* IE, the Node B shall use the new parameters for the related resource allocation operations.]

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

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

[FDD - If the RADIO LINK ADDITION REQUEST message includes an *E-DPCH Information* IE, which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the Node B shall use the value to determine the applicable

minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the Node B Communication Context, the Node B may use the default value defined in [18].

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

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

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel information* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B:]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new configuration and include the new configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK ADDITION RESPONSE message for the serving E-DCH RL.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK ADDITION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK ADDITION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for an E-DCH MAC-d flow, then the Node B shall not establish a transport bearer for the concerned E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for an E-DCH MAC-d flow and:]
  - [FDD if the Node B establishes a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the E-DCH MAC-d flow being established.]
  - [FDD if the Node B does not establish a transport bearer for the concerned E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK ADDITION RESPONSE message.]

### [TDD - HS-DSCH Setup]:

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

- [TDD The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the HS-PDSCH RL ID IE.]
- [TDD The Node B shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

- [TDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].]
- [TDD The Node B shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow. If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.]
- [TDD The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK ADDITION REQUEST message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK ADDITION REQUEST in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the *TSN-Length* IE is included in the *HS-DSCH TDD Information* IE, then the IE is used to indicate the TSN bits applied to the MAC-hs PDU frame.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple carriers for the UE.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple carriers and include the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to apply HSDPA resources distributed over multiple carriers, the Node B may indicate the number of carriers actually used by the UE and include the *Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UsedFrequency* IE in the *HS-SCCH Specific Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the Node B allows UE to use HSDPA resources distributed over multiple carriers, the Node B may include the *UARFCN* IE in the *HS-SCCH Specific Information Response LCR per UARFCN* IE in the RADIO LINK ADDITION RESPONSE message.]

### [TDD - Intra-Node B Serving HS-DSCH Radio Link Change]:

[TDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link]:

- [TDD The Node B may include the *HARQ Memory Partitioning* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]

#### [TDD - E-DCH]:

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

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

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

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

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

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

## **Response Message:**

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

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

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

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

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

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":

- [FDD start transmission on the DL DPDCH(s) of the new RL as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
- [TDD start transmission on the new RL at the CFN indicated in the Activation CFN IE as specified in [16].]

## 8.3.1.3 Unsuccessful Operation

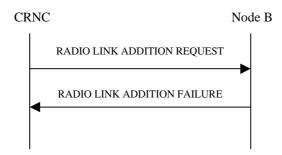


Figure 29: Radio Link Addition procedure: Unsuccessful Operation

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

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

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

[FDD - If the requested Serving HS-DSCH Radio Link Change was successful, or if the addition of the requested serving HS-DSCH Radio Link was successful or existed already but the Serving HS-DSCH Radio Link change was unsuccessful, the Node B shall indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION FAILURE message.]

[FDD - If the requested secondary serving HS-DSCH Radio Link Change was successful, or if the addition of the requested secondary serving HS-DSCH Radio Link was successful or existed already but the secondary serving HS-DSCH Radio Link change was unsuccessful, the Node B shall indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION FAILURE message.]

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

Typical cause values are as follows:

### Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported
- Reconfiguration CFN not elapsed
- CM not supported

- [FDD DPC Mode change not supported]
- Delayed Activation not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]

### **Transport Layer Cause**

Transport Resources Unavailable

#### **Miscellaneous Cause**

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

### 8.3.1.4 Abnormal conditions

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

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

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

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

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

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

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

[1.28Mcps TDD - For a multi-frequency cell, if the RADIO LINK ADDITION REQUEST message does not include the *UARFCN* IE, the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.]

[1.28Mcps TDD - For a single frequency cell, if the RADIO LINK ADDITION REQUEST message includes the *UARFCN* IE, the Node B shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.]

[FDD - If the concerned 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.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Serving Cell Change Information* IE but not the *HS-DSCH FDD Information* IE and the Node B Communication Context is not configured for HS-DSCH, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Serving E-DCH RL* IE but the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Serving Cell Change CFN* IE but neither the *Serving E-DCH RL* IE nor *HS-DSCH Serving Cell Change Information* IE is included into, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK ADDITION REQUEST message, but the *E-DPCH Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message includes the *HS-PDSCH RL-ID* IE not equal to the *RL ID* IE, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Serving RL* IE not equal to the *RL ID* IE, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

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

If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Information* IE [FDD - in the *HS-DSCH Serving Cell Change Information*] has the value "Indexed MAC-d PDU Size", the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

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

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

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

[TDD - If the RADIO LINK ADDITION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for HS-DSCH MAC-d flow being added, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD - If the RADIO LINK ADDITION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for E-DCH MAC-d flow being added, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

If the RADIO LINK ADDITION REQUEST message contains the *HS-PDSCH RL ID* IE [FDD - in the *HS-DSCH Serving Cell Change Information* IE] and/or *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the Node B but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH but the DCH is configured to be included as a part of the downlink CCTrCH, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *MIMO Activation Indicator* IE and/or *Sixtyfour QAM Usage Allowed Indicator* IE set to "Allowed", but does not contain the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size", then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Serving E-DCH RL ID* IE but contains the *Transport Bearer Not Requested Indicator* IE or there is at least one E-DCH MAC-d flow which transport bearer was not configured in the Node B, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with the existing RL which the transport bearer is established for the DCH in Node B, the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Addition* IE, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

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

# 8.3.2 Synchronised Radio Link Reconfiguration Preparation

#### 8.3.2.1 General

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

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

## 8.3.2.2 Successful Operation

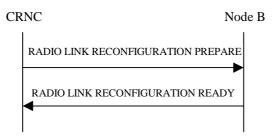


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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

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

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

#### **DCH Modification:**

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

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

- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Addition:**

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

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

- [TDD The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

#### **DCH Deletion:**

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

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

### **Physical Channel Modification:**

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

- [FDD If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPDCH Indicator For E-DCH Operation* IE and it is set to "UL DPDCH not present", the UL DPDCH resources shall be removed from the configuration.]

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

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

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

- [FDD The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *DL DPCH Slot Format* IE, the Node B shall set the new Downlink DPCH Structure to the new configuration.]

- [FDD If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

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

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

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

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

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

- [FDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [FDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this value to determine the beginning of uplink transmission in the new configuration according to [10].]
- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DTX Information parameter in the new configuration. If the choice of *DTX Information To Modify* IE is "Deactivate", then DRX should be deactived together with DTX.]
- [FDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DRX Information in the new configuration.]

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

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

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE, then the Node B shall deactivate the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

### [FDD - E-DPCH Handling]:

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

- [FDD If the *E-DPCH Information* IE includes the *Maximum Set of E-DPDCHs* IE, the Node B shall apply the contents of the Maximum Set in the new configuration.]
- [FDD If the *E-DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration]
- [FDD If the *E-DPCH Information* IE includes the *E-TFCS Information* IE, the Node B shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the uplink of the new configuration. If the *E-TFCS Information* IE contains the *E-DCH Minimum Set E-TFCI* IE the Node B shall use the value for the related resource allocation operation.]
- [FDD If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the Node B shall use the value to determine the applicable E-DPDCH power formula defined in [10]. If the *E-DPDCH Power Interpolation* IE is not present, the Node B shall use the E-DPDCH power extrapolation formula defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the Node B shall use the information according to [10]. If the *E-TFCI Boost Information* IE is not present, the Node B shall use the E-TFCI BetaEC Boost value "127" in the algorithm defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-DPCH Information* IE includes the *E-TTI* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-DPCCH Power Offset* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-RGCH 2-Index-Step* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-RGCH 3-Index-Step* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *HARQ Info for E-DCH* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *HS-DSCH Configured Indicator* IE, the Node B shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *Minimum Reduced E-DPDCH Gain Factor* IE , then the Node B shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the Node B Communication Context, the Node B may use the default value defined in [18].

### [TDD - UL/DL CCTrCH Modification]

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

- [TDD If the IE includes any of the *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD If the IE includes any *UL DPCH To Add* IE, *UL DPCH To Add LCR* IE, *UL DPCH To Add 7.68Mcps* IE, *DL DPCH To Add 1E*, the Node B shall include this DPCH in the new configuration.]

- [TDD If the IE includes any *UL DPCH To Delete* IE or *DL DPCH To Delete* IE, the Node B shall remove this DPCH in the new configuration.]
- [TDD If the IE includes any *UL DPCH To Modify* IE or *DL DPCH To Modify* IE and includes any of the *Repetition Period* IE, *Repetition Length* IE or *TDD DPCH Offset* IE, or the message includes UL/DL Timeslot Information and includes any of the [3.84Mcps TDD *Midamble Shift And Burst Type* IE], [1.28Mcps TDD *Midamble Shift LCR* IE], [7.68Mcps TDD *Midamble Shift And Burst Type 7.68Mcps* IE], or *TFCI Presence* IE or the message includes UL/DL Code information and includes [3.84Mcps TDD *TDD Channelisation Code* IE], [1.28Mcps TDD *TDD Channelisation Code* IE], [1.28Mcps TDD *TDD UL DPCH Time Slot Format LCR* IE], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]
- [1.28Mcps TDD If the *UL CCTrCH To Modify* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]
- [1.28Mcps TDD If the *UL CCTrCH to Modify* IE includes the *TDD TPC UL Step Size* IE, the Node B shall apply this value to the uplink TPC step size in the new configuration.]
- [TDD If the *DL CCTrCH to Modify* IE includes the *TDD TPC DL Step Size* IE, the Node B shall apply this value to the downlink TPC step size in the new configuration.]
- [1.28Mcps TDD If the *DL DPCH To Modify Per RL* IE includes the *TDD TPC DL Step Size* IE and the *RL ID* IE in the *DL DPCH To Modify Per RL* IE is same as the *HS-PDSCH RL ID* IE, the Node B shall apply this value to the HS-SCCH TPC step size in the new configuration.]
- [1.28Mcps TDD If the *UL Timeslot Information LCR* IE includes the *PLCCH Information* IE, the Node B shall delete / add / modify the PLCCH assignment according to the content when the new configuration is used.]

### [TDD - UL/DL CCTrCH Addition]

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

[TDD - If the *UL/DL CCTrCH To Add* IE includes any [3.84Mcps TDD - *UL/DL DPCH Information* IE] [1.28Mcps TDD - *UL/DL DPCH Information LCR* IE] [7.68Mcps TDD - *TDD Channelisation Code 7.68Mcps* IE], the Node B shall reserve necessary resources for the new configuration of the UL/DL DPCH(s) according to the parameters given in the message.]

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

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

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

[1.28Mcps TDD - If the DL DPCH To Add Per RL IE includes the TDD TPC DL Step Size IE and the RL ID IE in the DL DPCH To Add Per RL IE is same as the HS-PDSCH RL ID IE , the Node B shall apply this value to the HS-SCCH TPC Step SIZE SIZ

[1.28Mcps TDD - If the *UL Timeslot Information LCR* IE includes the *PLCCH Information* IE, the Node B shall add the PLCCH assignment when the new configuration is used.]

### [TDD - UL/DL CCTrCH Deletion]

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

### **DL Power Control:**

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power

balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, when the new configuration has been activated, according to subclause 8.3.7, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.]

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

### [TDD - DSCH Addition/Modification/Deletion]:

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

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

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

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

- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified, if the *TNL QoS* IE is included and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply between the Node B and the CRNC for the related USCHs.]
- [TDD The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each USCH.]

### **RL Information:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *pth* to "*PhCH number p*".]
- [FDD If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [FDD If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [3.84 Mcps TDD and 7.68Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum CCTrCH DL power, otherwise the maximum CCTrCH DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. If no *Maximum Downlink Power* IE is included (even if *CCTrCH Maximum DL*

*Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

- [3.84 Mcps TDD and 7.68Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum CCTrCH DL power, otherwise the minimum CCTrCH DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. If no *Minimum Downlink Power* IE is included (even if *CCTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD and 7.68Mcps TDD If the *DL CCTrCH To Modify* IE is included and *Maximum CCTrCH DL Power to Modify* IE and/or *Minimum CCTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCTrCH. If the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values for all other DCH type CCTrCHs of the radio link.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Modify* IE is included and *Maximum DL Power to Modify LCR* IE and/or *Minimum DL Power to Modify LCR* IE are included, the Node B shall apply the values in the new configuration for this timeslot, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [3.84Mcps TDD and 7.68Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]
- [3.84Mcps TDD and 7.68Mcps TDD The initial power, maximum power, and minimum power for a DSCH type CCTrCH to be added or modified, shall be determined as follows:
  - If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
  - If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].

- [1.28 Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot in a DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the initial DL power, otherwise the initial DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]
- [1.28Mcps TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot within the DSCH type CCTrCH by the following rule: If both the *CCTrCH Initial DL Transmission Power* IE and the *DL Time Slot ISCP Info LCR* IE are included then the Node B shall use that power for the PDSCH power, otherwise the PDSCH power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. If *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each PDSCH and on each timeslot of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing RL/timeslots when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL PDSCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL PDSCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD If the *DL CCTrCH To Modify* IE is included and the *Maximum CCTrCH DL Power to Modify* IE and/or the *Minimum CCTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [FDD If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]
- [1.28Mcps TDD If the *RL Information* IE message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]
- [FDD If the *RL Information* IE includes the *F-DPCH Slot Format* IE and if the Node B Communication Context is configured to use F-DPCH in the downlink, then the Node B shall use this information to configure the F-DPCH slot format of each RL according to [7].]

### [TDD - PDSCH RL ID]:

- [TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE then in the new configuration the Node B shall use the PDSCH and/or PUSCH in this radio link.]

### Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

### **HS-DSCH Setup:**

If the HS-DSCH Information IE is present in the RADIO LINK RECONFIGURATION PREPARE message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION PREPARE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SICH SIR Target* IE in the *HS-DSCH Information* IE, the Node B shall use this value to determine the HS-SICH SIR Target. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size* Format IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [FDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE without HS-SCCH constraint indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use a different HS-SCCH in consecutive TTIs for this UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION PREPARE message
  includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple frequencies for
  UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple frequencies and include the HS-SCCH Specific Information Response LCR per UARFCN IE in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B may indicate the number of multiple frequencies actually used by the UE and include the *Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

### [FDD – Secondary Serving HS-DSCH Setup:]

[FDD – If the *C-ID* IE is present in the *Additional HS Cell Information RL Reconf Prep* IE in the RADIO LINK RECONFIGURATION PREPARE message, then:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

### Intra-Node B Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- In the new configuration the Node B shall de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link and allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.
- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- If a reset of the MAC-hs is not required the Node B shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION READY message.

## [FDD – Intra-Node B Secondary Serving HS-DSCH Radio Link Change:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Additional HS Cell Information RL Reconf Prep* IE, then the *HS-PDSCH RL ID* IE indicates the new secondary serving HS-DSCH Radio Link:]

- [FDD In the new configuration the Node B shall de-allocate the HS-PDSCH resources of the old secondary serving HS-PDSCH Radio Link and allocate the HS-PDSCH resources for the new secondary serving HS-PDSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the HS-SCCH Specific Secondary Serving Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

#### **HS-DSCH Modification:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the Node B allows the CRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information To Modify* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION PREPARE in the *HS-DSCH Information To Modify* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Window Size* IE or *T1* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated values in the new configuration for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-d PDU Size Index* IE in the *Modify Priority Queue* choice, the Node B shall delete the previous list of MAC-d PDU Size Index values for the related HSDPA Priority Queue and use the MAC-d PDU Size Index values indicated in the *MAC-d PDU Size Index* IE in the new configuration.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *CQI Feedback Cycle k* IE, the *CQI Repetition Factor* IE, the *ACK-NACK Repetition Factor* IE, the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated CQI Feedback Cycle k value, the CQI Repetition Factor or the ACK-NACK Repetition Factor, ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH Information* IE or the *HS-DSCH Information To Modify* IE, then the Node B shall use the measurement power offset as described in [10] subclause 6A.2.]

- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use the indicated power offset in the new configuration.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the HS-SICH SIR Target IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this value to the SIR Target in the new configuration. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the HS-SICH TPC step size IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this value to the HS-SICH TPC step size in the new configuration.]
- [FDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH parameters corresponding to the HS-DSCH. The Node B shall then report the values for the parameters which are used in the new configuration specified in the [3.84Mcps TDD *HS-SCCH Specific Information Response*] [1.28Mcps TDD *HS-SCCH Specific Information Response LCR*] [7.68Mcps TDD *HS-SCCH Specific Information Response* 7.68Mcps] IEs in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the HS-DSCH Information To Modify IE includes the HS-PDSCH Code Change Grant IE, then the Node B may modify the HS-PDSCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the Continuous Packet Connectivity HS-SCCH less Information Response IE in the RADIO LINK RECONFIGURATION READY message. If the concerned Node B is not in Continuous Packet Connectivity HS-SCCH less mode, the RNC shall not include the HS-PDSCH Code Change Grant IE in the HS-DSCH Information To Modify IE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the Node B shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use, in the new configuration, the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Physical Layer Category* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information in the new configuration and may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD If the *MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then the Node B shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in accordance with the *MIMO Mode Indicator* IE.]
  - [FDD If the *MIMO Mode Indicator* IE is set to "Activate", then the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the Node B shall include the HS-DSCH TB Size Table Indicator IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- [1.28Mcps TDD For a multi-frequency cell, if the HS-DSCH Information To Modify IE includes the HS-SCCH Code Change Grant IE, and the Node B allows UE to use HSDPA resources distributed over multiple frequencies, then the Node B may modify the HS-SCCH Codes corresponding to the HS-DSCH over multiple frequencies, the Node B shall then report the codes which are used in the new configuration specified in the HS-SCCH Specific Information Response LCR per UARFCN IE in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

### [FDD – Secondary Serving HS-DSCH Modification:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH FDD Secondary Serving Information To Modify* IE in the *Additional HS Cell Information RL Reconf Prep* IE, then:]

- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE or the *HS-DSCH FDD Secondary Serving Information To Modify* IE, then the Node B shall use the measurement power offset as described in [10] subclause 6A.2.]
- [FDD If the *HS-DSCH FDD Secondary Serving Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the secondary serving HS-SCCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the HS-DSCH FDD Secondary Serving Information To Modify IE includes the HS-PDSCH Code Change Grant IE, then the Node B may modify the secondary serving HS-PDSCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message. If the concerned Node B is not in Continuous Packet Connectivity HS-SCCH less mode, the RNC shall not include the HS-PDSCH Code Change Grant IE in the HS-DSCH Information To Modify IE.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCHTB*

Size Table Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

#### [FDD – Secondary Serving HS-DSCH Removal:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Prep* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

#### **HS-DSCH MAC-d Flow Addition/Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated HS-DSCH MAC-d flows. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release the HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d Flows To Add* IE, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If Node B Communication Context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION PREPARE message in the *HS-DSCH MAC-d Flows To Add* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B may include the *HARQ Memory Partitioning per UARFCN* IE in the RADIO LINK RECONFIGURATION READY message.]

### [FDD – Enhanced HS Serving Cell Change:]

[FDD - Upon receipt of the RADIO LINK RECONFIGURATION PREPARE message, if the Enhanced HS Serving Cell Change is preconfigured in the Node B for the Node B Communication Context, the Node B may execute the Enhanced HS Serving Cell Change procedure according to [49]]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced HS Serving CC Abort* IE in the *HS-DSCH Information To Modify* IE or the *HS-DSCH FDD Information* IE then the Node B shall not execute the synchronized Enhanced HS Serving Cell Change procedure when performing the Intra-Node B Serving HS-DSCH Radio Link Change or, at inter Node B radio link change, the HS-DSCH Setup.]

### [FDD - E-DCH Setup:]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message:]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel information* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Process Allocation* For 2ms Scheduled Transmission Grant IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B:]
  - [FDD The Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding
    E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK
    RECONFIGURATION READY message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION READY message for the serving E-DCH RL.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION PREPARE message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]

- [FDD If in the RADIO LINK RECONFIGURATION PREPARE message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *SixteenQAM UL Operation Indicator* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]

### [FDD - E-DCH Radio Link Handling:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH RL Indication* IE in the *RL Information* IE:]

- [FDD The Node B shall setup the E-DCH resources, as requested or as configured in the Node B communication context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The Node B may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the Node B may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The Node B shall remove the E-DCH resources, if any, on the Radio Links, that are indicated by the *E-DCH RL Indication* set to "Non E-DCH".]
- [FDD For each RL for which the *E-DCH RL Indication* IE is set to "E-DCH", and which has or can have a common generation of E-RGCH information with another RL (current or future) when the Node B would contain the E-DCH serving RL, the Node B shall include the *E-DCH RL Set ID* IE in the RADIO LINK RECONFIGURATION READY message. The value of the *E-DCH RL Set ID* IE shall allow the RNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

### [FDD - Serving E-DCH Radio Link Change:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [FDD If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD If the new Serving E-DCH RL is in this Node B:]
  - [FDD The Node B may allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION READY message for the new serving E-DCH RL.]
- [FDD The Node B may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message for every E-DCH Radio Links in the Node B.]

#### [FDD - E-DCH Modification:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information To Modify* IE, then:]

- [FDD If the *E-DCH FDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH HARQ Power Offset FDD* IE in the *E-DCH FDD Information To Modify* IE for an E-DCH MAC-d flow the Node B shall use this information for calculating the unquantised gain factor for an E-TFC ( $\beta_{ed,i,uq}$ ) as defined in [10].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains the E-DCH Grant Type and it is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH Grant Type and it is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information To Modify* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE

and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d PDU Size Format* IE in the *E-DCH FDD Information To Modify* IE, then the Node B shall use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When an logical channel is deleted, all its associated configuration data shall also removed.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information To Modify* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Process Allocation* For 2ms Scheduled Transmission Grant IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this Node B, the Node B may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-e Reset Indicator* IE in the *E-DCH FDD Information To Modify* IE, then the Node B shall use this value to determine whether MAC-e Reset is performed in the UE for sending the HARQ Failure Indication.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *SixteenQAM UL Operation Indicator* IE in the *E-DCH FDD Information To Modify* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH DL Control Channel Grant Information* IE in the *E-DCH FDD Information To Modify* IE, the Node B may modify E-AGCH Channelisation Code, E-RGCH/E-HICH Channelisation Code, E-RGCH Signature Sequence and/or E-HICH Signature Sequence for the E-DCH RL indicated by the *E-DCH RL ID* IE. The Node B shall then report the modified configuration which is used in the new configuration specified in the *E-DCH FDD DL Control Channel Information* IE for each E-DCH RL in the RADIO LINK RECONFIGURATION READY message.]

### [FDD - E-DCH MAC-d Flow Addition/Deletion:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]

## [TDD - Intra-Node B Serving E-DCH Radio Link Change:]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH Serving RL IE, this indicates the new Serving E-DCH Radio Link:]

- [TDD In the new configuration the Node B shall de-allocate the E-DCH resources of the old Serving E-DCH Radio Link and allocate the E-DCH resources for the new Serving E-DCH Radio Link.]
- [TDD The Node B shall allocate E-AGCH parameters [1.28Mcps TDD and E-HICH parameters] corresponding to the E-DCH and include the *E-AGCH Specific Information Response TDD* IE [1.28Mcps TDD -

and *E-HICH Specific Information Response TDD* [E] in the *E-DCH TDD Information Response* [E in the RADIO LINK RECONFIGURATION READY message.]

- [TDD - If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]

### [TDD - E-PUCH Handling]:

[3.84Mcps TDD and 7.68Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-PUCH Information* IE, the Node B shall apply the parameters to the new configuration.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-PUCH Information LCR* IE, the Node B shall apply the parameters to the new configuration.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-TFCS Information TDD* IE, the Node B shall apply the beta parameters to the new configuration.]

## [3.84Mcps TDD - E-DCH Setup]:

[3.84Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information* IE and *E-DCH Non-scheduled Grant Information TDD* IE if there are to be non-scheduled grants.]

### [1.28Mcps TDD - E-DCH Setup]:

[1.28Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information LCR* IE and *E-DCH Non-scheduled Grant Information LCR TDD* IE if there are to be non-scheduled grants.]

## [7.68Mcps TDD - E-DCH Setup]:

[7.68Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information 7.68Mcps* IE and *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE if there are to be non-scheduled grants.]

### [TDD - E-DCH MAC-d Flow Addition/Deletion:]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining non-scheduled E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the non-scheduled E-DCH configuration from the Node B Communication Context and release the non-scheduled E-DCH resources [1.28 Mcps TDD - and the related Signature Sequence of the Non-scheduled E-HICH].]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]

#### [3.84Mcps TDD - E-DCH Non-scheduled allocations:]

[3.84Mcps TDD - If the *E-DCH Non-scheduled Grant Information TDD* IE is present in the RADIO LINK RECONFIGURATION PREPARE message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

### [1.28Mcps TDD - E-DCH Non-scheduled allocations:]

[1.28Mcps TDD - If the *E-DCH Non-scheduled Grant Information LCR TDD* IE is present in the RADIO LINK RECONFIGURATION PREPARE message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

### [7.68Mcps TDD - E-DCH Non-scheduled allocations:]

[7.68Mcps TDD - If the *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE is present in the RADIO LINK RECONFIGURATION PREPARE message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

### [TDD - E-DCH Modification:]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d PDU Size Format* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the [3.84Mcps TDD - *E-DCH TDD Information* IE][1.28Mcps TDD - *E-DCH TDD Information LCR* IE][7.68Mcps TDD - *E-DCH TDD Information 7.68Mcps* IE], then:]

- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH TDD Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH TDD Maximum Bitrate 7.68Mcps* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [7.68Mcps TDD *E-DCH TDD Information* 7.68Mcps IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps* IE]includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Maximum Number of Retransmission for Scheduling Info* LCR IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE, then the Node B shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH TDD Information To Modify* IE, then:]

- [TDD If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the Node B shall use this information to set the retransmission timer.]
- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the Node B shall use this new power offset value.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Grant Type* IE, the Node B shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall use this value to determine whether MAC-e Reset is performed in the UE for sending the HARQ Failure Indication.]

### [FDD - Phase Reference Handling]:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Primary CPICH Usage For Channel Estimation* IE, the Node B shall assume that Primary CPICH usage for channel estimation has been reconfigured.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Secondary CPICH Information Change* IE, the Node B shall assume that Secondary CPICH usage for channel estimation has been reconfigured.]

### [FDD - Fast Reconfiguration]:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Fast Reconfiguration Mode* IE, the Node B shall, if supported, and if it is possible to base the synchronization of the reconfiguration on the detection of the change in the uplink scrambling code for this reconfiguration, include the *Fast ReconfigurationPermission* IE in the RADIO LINK RECONFIGURATION READY message.]

### [1.28Mcps TDD - Power Control GAP:]

[1.28Mcps TDD - If the *Power Control GAP* IE is included in the RADIO LINK RECONFIGURATION PREPARE message, the Node B may use the value for the power control for HS-SCCH and HS-SICH according to the [21].]

#### General

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the [TDD - *DSCHs To Modify, DSCHs To Add, USCHs To Modify, USCHs To Add*], *HS-DSCH Information*, *HS-DSCH Information To Modify, HS-DSCH MAC-d Flows To Add*, [TDD - *E-DCH MAC-d Flows to Add, E-DCH TDD Information to Modify* IE] [FDD - *RL Specific E-DCH Information* IE] or in the *RL Specific DCH Information* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being added or any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included [FDD - if the *Transport Bearer Not Requested Indicator* IE is not included for this DCH,] only for one of the DCH in the set of co-ordinated DCHs.

[FDD - If the RADIO LINK RECONDIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for a DCH or an E-DCH MAC-d flow, then the Node B shall not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION READY message.]

[FDD - If the RADIO LINK RECONDIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH or an E-DCH MAC-d flow and:]

- [FDD if the Node B establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH or E-DCH MAC-d flow being established.]
- [FDD if the Node B does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION READY message.]

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links [FDD - if the *Transport Bearer Not Requested Indicator* IE is not included for this DCH].

[FDD - In the case of an E-DCH RL being combined with another E-DCH RL within the Node B, the *E-DCH FDD Information Response* IE shall be included only for one of the combined E-DCH RLs.]

## 8.3.2.3 Unsuccessful Operation

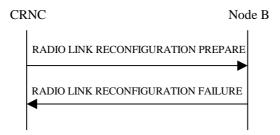


Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs, the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

### **Radio Network Layer Cause**

- UL SF not supported
- DL SF not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- Number of DL codes not supported
- Number of UL codes not supported
- RL Timing Adjustment not supported
- F-DPCH not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- E-DCH MAC-d PDU Size Format not available
- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]

## **Transport Layer Cause**

- Transport Resources Unavailable

### **Miscellaneous Cause**

- O&M Intervention
- Control processing overload
- HW failure

### 8.3.2.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-Static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IE, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the RADIO LINK RECONFIGURATION PREPARE message IE includes more than one *DL Reference Power* IE, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message is to modify UE channel estimation information for an existing RL and the modification is not allowed according to [10] subclause 4.3.2.1, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE deleting the last remaining Priority Queue of an HS-DSCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[TDD - If multiple radio links exist within the Node B Communication Context and the RADIO LINK RECONFIGURATION PREPARE message does not include a *RL ID* IE within each *UL DPCH To Add Per RL* IE, *DL DPCH To 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.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Indexed MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use MAC-d PDU Size Index, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Fixed MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use MAC-d PDU Size List, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-DSCH Information* IE and if the *Measurement Power Offset* IE is not present, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the F-DPCH Information IE and the DL DPCH Information IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned the Node B Communication Context is configured to use DPCH in the downlink in the old configuration and the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Power Information* IE , then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink in the old configuration and the RADIO LINK RECONFIGURATION PREPARE message includes at least one but not all of the *TFCS* IE, *DL DPCH Slot Format* IE, *TFCI Signalling Mode* IE, *Multiplexing Position* IE, *Limited Power Increase* IE and *DL DPCH Power Information* IE in the *DL DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the 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.]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message, but the *E-DPCH Information* IE is not present or if any of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE, *E-TFCS Information* IE, *E-TTI* IE or *E-DPCCH Power Offset* IE or *HS-DSCH Configured Indicator* IE are not present in the *E-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Primary CPICH Usage For Channel Estimation* IE and/or *Secondary CPICH Information Change* IE and if in the new configuration Node B shall

assume that the UE is not using the Primary CPICH for channel estimation nor the Secondary CPICH, Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one of the *Not Used* IEs, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-PDSCH RL ID* IE and/or the *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the new configuration but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as 'HS-DSCH not configured' then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE or *E-DCH MAC-d Flows To Delete* IE in addition to the *E-DCH FDD Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE, *E-DCH MAC-d Flows To Delete* IE and the Node B Communication Context is not configured for E-DCH, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information To Modify* IE deleting the last remaining E-DCH Logical Channel of an E-DCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *E-DCH FDD Information* IE and the E-DCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[TDD - if the radio link was not previously configured to support E-DCH, then if the RADIO LINK RECONFIGURATION PREPARE message includes one of the following E-DCH information elements then it shall contain all of them otherwise the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.: *E-DCH Serving RL* IE, [3.84Mcps TDD and 7.68Mcps TDD - *E-PUCH Information* IE, *E-TFCS Information TDD* IE], [1.28Mcps TDD - *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE], *E-DCH MAC-d Flows to Add* IE, and [3.84Mcps TDD - *E-DCH TDD Information* IE], [1.28Mcps TDD - *E-DCH TDD Information LCR* IE] [7.68Mcps TDD - *E-DCH TDD Information 7.68Mcps* IE].]

[FDD - If the Fast Reconfiguration IE is included in the RADIO LINK RECONFIGURATION PREPARE message and the UL Scrambling Code IE does not indicate an uplink scrambling code different from the currently used uplink scrambling code the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE in addition to the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE in addition to the *Continuous Packet Connectivity HS-SCCH less Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE while the Continuous Packet Connectivity HS-SCCH less configuration isn"t

configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity *DTX-DRX* configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *DRX Information To Modify* IE in *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity DRX configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only" but no *Transport Format Set* IE for the uplink for this DCH and the Node B had ignored the configuration of Transport Format Set for uplink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only" but no *Transport Format Set* IE for the downlink for this DCH and the Node B had ignored the configuration of Transport Format Set for downlink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Bearer Not Requested Indicator* IE for a DCH but does not contain the corresponding *DCH ID* IE and the *Unidirectional DCH indicator* IE set to "Uplink DCH only" for the DCH in *DCH Information To Add* IE, the Node B shall reject the procedure using the the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to apply UL DPCCH Slot Format 4 but is not configured to use F-DPCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to apply UL DPCCH Slot Format 0 or 2 and execute Continuous Packet Connectivity DTX-DRX operation, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to apply the "Closed loop mode 1" and if the concerned Node B Communication Context is not configured to apply UL DPCCH Slot Format 2 or 3, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to apply MIMO or allowed to apply 64 QAM but is not configured to use flexible MAC-d PDU Size, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Reconf Prep* IE, then the Node B shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains an *Additional HS Cell Information RL Reconf Prep* IE and the concerned Node B Communication Context is configured to apply MIMO, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE for a DCH in the *RL Specific DCH Information* IE but does not include the *DCH ID* IE for the DCH in the *DCHs to Add* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but does not contain the *F-DPCH Information* IE and the concerned Node B Communication Context is not previously configured to use F-DPCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to have the Serving E-DCH Radio Link but there is at least one E-DCH MAC-d flow which the Transport Bearer is not configured in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with existing RL which the transport bearer is established for the DCH in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

# 8.3.3 Synchronised Radio Link Reconfiguration Commit

## 8.3.3.1 General

This procedure is used to order the Node B to switch to the new configuration for the Radio Link(s) within the Node B, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

The message shall use the Communication Control Port assigned for this Node B Communication Context.

# 8.3.3.2 Successful Operation



Figure 32: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure

- [TDD at the next coming CFN with a value equal to the value requested by the CRNC in the CFN IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.]
- [FDD if the Fast Reconfiguration IE is not included in the RADIO LINK RECONFIGURATION COMMIT message at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.]
- [FDD if the Fast Reconfiguration IE is included in the RADIO LINK RECONFIGURATION COMMIT message as soon as the Node B detects that the UE uses the new configuration in the uplink (e.g. the Node B detects that the UE uses the new scrambling code used for the uplink by sending the RADIO LINK RESTORATION message). In order to limit the period for the detection in the Node B the CFN in the RADIO LINK RECONFIGURATION COMMIT message indicates the earliest possible time instant at which the UE might use the new configuration.]

[FDD - If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the Node B.]

[FDD - If the *Active Pattern Sequence Information* IE is not included in the RADIO LINK RECONFIGURATION COMMIT message and a new Compressed Mode Configuration exists in the prepared configuration, the Node B shall behave as if an *Active Pattern Sequence Information* IE with an empty *Transmission Gap Pattern Sequence Status* IE was included.]

When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

In the case of a Transport Channel or MAC-d flow modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the configuration switching point (defined above). The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1 and in [24], subclauses 5.8.2 and 5.8.3.

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has received the RADIO LINK RECONFIGURATION COMMIT message via the old Communication Control Port.

[FDD - If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the configuration switching point (defined above). From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

[FDD - If the RADIO LINK RECONFIGURATION COMMIT message includes the *Active Pattern Sequence Information* IE and the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall 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 configuration switching point (defined above), the Node B shall initiate the Radio Link Failure procedure.

[FDD - If the *Fast Reconfiguration* IE is included in the RADIO LINK RECONFIGURATION COMMIT message and the Node B did not include the *Fast ReconfigurationPermission* IE in the RADIO LINK RECONFIGURATION READY message, the Node B shall initiate the Radio Link Failure procedure.]

# 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

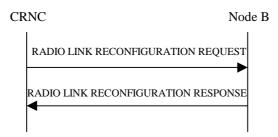


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

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.
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.]
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]

- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Addition:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH To Add* IE, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.
- [FDD For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCHas the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

#### [FDD - Physical Channel Modification]:

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPDCH Indicator For E-DCH Operation* IE set to "UL DPDCH not present", the UL DPDCH resources shall be removed from the configuration.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the information when building TFCIs in the new configuration.
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information* IE, then:]

- [FDD The Node B shall configure the concerned Node B Communication Context for DTX operation according to [10].]
- [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the Node B shall configure the concerned Node B Communication Context for DRX operation according to [10].]

 $[FDD-If the RADIO LINK RECONFIGURATION REQUEST message includes the {\it Continuous Packet Connectivity DTX-DRX Information To Modify IE}, then:]$ 

- [FDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [FDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this value to determine the beginning of uplink transmission in the new configuration according to [10].]
- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DTX Information parameter in the new configuration. If the choice of *DTX Information To Modify* IE is "Deactivate", then DRX should be deactived together with DTX.]
- [FDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall use this information to modify the indicated DRX Information in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Information* IE, then:]

- [FDD The Node B shall configure the Serving HS-DSCH Radio Link for Continuous Packet Connectivity HS-SCCH less operation in the new configuration according to [10].]
- [FDD The Node B shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the *Continuous Packet Connectivity HS-SCCH less Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the Node B shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE, then the Node B shall deactivate the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

## [FDD - E-DPCH Handling]:

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *E-TFCS Information* IE, the Node B shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the uplink of the new configuration. If the *E-TFCS Information* IE contains the *E-DCH Minimum Set E-TFCI* IE the Node B shall use the value for the related resource allocation operation.]

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the Node B shall use the value to determine the applicable E-DPDCH power formula defined in [10]. If the *E-DPDCH Power Interpolation* IE is not present, the Node B shall use the E-DPDCH power extrapolation formula defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION REQUEST message.]

[FDD - If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the Node B shall use the information according to [10]. If the *E-TFCI Boost Information* IE is not present, the Node B shall use the E-TFCI BetaEC Boost value "127" in the algorithm defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-DPCCH Power Offset* IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-RGCH 2-Index-Step* IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an E-DPCH Information IE which contains the E-RGCH 3-Index-Step IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *HARQ Info for E-DCH* IE, the Node B shall use the value when the new configuration is being used.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the Node B shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the Node B Communication Context, the Node B may use the default value defined in [18].

#### [TDD - UL/DL CCTrCH Modification]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD - If the *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE includes *TFCS* IE and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the Node B shall apply this value as the new configuration and use it for the UL inner loop power control according [19] and [21].]

## [TDD - UL/DL CCTrCH Deletion]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Delete* IE or *DL CCTrCH To Delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

#### **DL Power Control:**

- [FDD - If the *Radio Link Information* IE includes the *DL Reference Power* IE and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **RL Information:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH or on the F-DPCH of the Radio Link once the new configuration is being used. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [FDD If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code or on the F-DPCH of the Radio Link once the new configuration is being used.]
- [3.84 Mcps TDD and 7.68Mcps TDD If the *CCTrCH Maximum DL Transmission Power* IE and/or the *CCTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other DCH type CCTrCHs.]
- [3.84 Mcps TDD and 7.68Mcps TDD The maximum power and minimum power for a DSCH type CCTrCH to be modified, shall be determined as follows:
  - If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum and maximum power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
  - If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum power, however, is subject to control by the CRNC via the frame protocol].

- [1.28 Mcps TDD If *Maximum DL Power* IE and/or *Minimum DL Power* IE are included within *DL Timeslot Information LCR* IE, the Node B shall apply the values in the new configuration for this timeslot within a DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [1.28 Mcps TDD If the *CCTrCH Maximum DL Transmission Power* IE and/or the *CCTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CCTrCH, if the *RL Information* IE includes the *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for other timeslots.]
- [FDD If the concerned Node B Communication Context is configured to use DPCH in the downlink and if the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [1.28Mcps TDD If the *RL Information* IE contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]
- [FDD If the *RL Information* IE contains the *F-DPCH Slot Format* IE and if the Node B Communication Context is configured to use F-DPCH in the downlink, then the Node B shall use this information to configure the F-DPCH slot format of each RL according to [7].]

#### **Signalling Bearer Re-arrangement:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Signalling Bearer Request Indicator* IE, the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

## **HS-DSCH Setup:**

If the HS-DSCH Information IE is present in the RADIO LINK RECONFIGURATION REQUEST message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If RADIO LINK RECONFIGURATION REQUESTmessage includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator*

IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION REQUEST in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH Information IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the HARQ Preamble Mode IE in the HS-DSCH Information IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the HARQ Preamble Mode IE is not included or if the mode 0 is applied, then the Node B shall not include the HARQ Preamble Mode Activation Indicator IE in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SICH SIR Target* IE in the *HS-DSCH Information* IE, the Node B shall use this value to determine the HS-SICH SIR Target. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d PDU Size* Format IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated format in user plane frame structure for HS-DSCH channels [24] and MAC-hs [32].
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [FDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B shall activate the MIMO mode for the HS-DSCH Radio Link and the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE without HS-SCCH constraint indicator* IE is included in the *HS-DSCH FDD Information* IE, then the Node B may use a different HS-SCCH in consecutive TTIs for this UE.]

- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- [1.28Mcps TDD For a multi-frequency cell, if the RADIO LINK RECONFIGURATION REQUEST message includes the *Number of Supported Carriers* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE, the Node B shall use this information to allocate HSDPA resources over multiple frequencies for UE.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH over multiple frequencies and include the HS-SCCH Specific Information Response LCR per UARFCN IE in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B shall include the *HARQ Memory Partitioning per UARFCN* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD For a multi-frequency cell, if the Node B allows UE to use HSDPA resources distributed over multiple frequencies, the Node B may indicate the number of multiple frequencies actually used by the UE and include the *Multi-Carrier number* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### [FDD – Secondary Serving HS-DSCH Setup:]

[FDD – If the *C-ID* IE is present in the *Additional HS Cell Information RL Reconf Req* IE in the RADIO LINK RECONFIGURATION REQUEST message, then:]

- [FDD The Node B shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the Node B shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

## Intra-Node B Serving HS-DSCH Radio Link Change:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The Node B shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.

- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68Mcps TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- If a reset of the MAC-hs is not required the Node B shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

#### [FDD – Intra-Node B Secondary Serving HS-DSCH Radio Link Change:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Additional HS Cell Information RL Reconf Req* IE, then the *HS-PDSCH RL ID* IE indicates the new secondary serving HS-DSCH Radio Link:]

- [FDD The Node B shall release the HS-PDSCH resources on the old secondary serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new secondary serving HS-DSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **HS-DSCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information To ModifyUnsynchronised* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the Node B allows the CRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the Node B has allocated capacity on user plane as described in [24]. If Node B Communication Context is configured to use the "Flexible MAC-d PDU Size", then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer for the Priority Queue of Node B Communication Context.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]

- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B shall use the indicated power offset in the new configuration.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the HS-SICH SIR Target IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the Node B shall use this value to the SIR Target in the new configuration. The *HS-SICH SIR Target* IE indicates the received UL SIR target of HS-SICH NACK for this UE.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the HS-SICH TPC step size IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the Node B shall use this value to the HS-SICH TPC step size in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the Node B shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the Node B shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Physical Layer Category* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the Node B shall use this information in the new configuration and may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD If the MIMO Mode Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then the Node B shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in accordance with the MIMO Mode Indicator IE.]
  - [FDD If the *MIMO Mode Indicator* IE is set to "Activate", then the Node B shall decide the UE reporting configuration (N/M ratio) according to [10] for MIMO and include the *MIMO N/M Ratio* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then the Node B may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE with value set to "not allowed", then the Node B shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the Node B shall include the HS-DSCH TB Size Table Indicator IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

## [FDD – Secondary Serving HS-DSCH Modification:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH FDD Secondary Serving Information To ModifyUnsynchronised* IE in the *Additional HS Cell Information RL Reconf Req* IE and if the Secondary Serving HS-DSCH Radio Link is in the Node B, then:]

- [FDD - If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH FDD Secondary Serving Information To ModifyUnsynchronised* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]

- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, then the Node B may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the Node B shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE with value set to "not allowed", then the Node B shall not use 64 QAM for the Secondary Serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the Node B shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [32] for HS-DSCH Transport Block Size signalling.]

## [FDD – Secondary Serving HS-DSCH Removal:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Req* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

#### **HS-DSCH MAC-d Flow Addition/Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs and if the Serving HS-DSCH Radio Link is in the Node B, then the Node B shall use this information to add/delete the indicated HS-DSCH MAC-d flows on the Serving HS-DSCH Radio Link. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION REQUEST message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release any existing HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d Flows To Add* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24]. If Node B Communication Context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then Node B shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer received in RADIO LINK RECONFIGURATION REQUEST message in the *HS-DSCH MAC-d Flows To Add* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the Node B shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]

## [FDD – Enhanced HS Serving Cell Change:]

[FDD - Upon receipt of the RADIO LINK RECONFIGURATION REQUEST message, if the Enhanced HS Serving Cell Change is preconfigured in the Node B for the Node B Communication Context, the Node B may execute the Enhanced HS Serving Cell Change procedure according to [49]]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Enhanced HS Serving CC Abort* IE in the *HS-DSCH Information To Modify Unsynchronised* IE or the *HS-DSCH FDD Information* IE then the Node B shall not execute the unsynchronized Enhanced HS Serving Cell Change procedure when performing the Intra-Node B Serving HS-DSCH Radio Link Change or, at inter Node B radio link change, the HS-DSCH Setup.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *No of Target Cell HS-SCCH Order* IE then the Node B shall repeat the Target Cell HS-SCCH Order on the HS-SCCH the number of times defined in the IE. ]

#### [FDD - E-DCH Setup:]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message:]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel information* IE in the *E-DCH MAC-d Flows Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH Information* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels [24] and MAC [32].]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Process Allocation* For 2ms Scheduled Transmission Grant IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the Serving E-DCH RL IE:]
  - [FDD the Node B shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the serving E-DCH RL.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *HS-DSCH Configured Indicator* IE and/or the *Maximum Set of E-DPDCHs* IE, and/or the *Puncture Limit* IE and/or the *E-TTI* IE, the Node B shall use and apply the value(s) in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]

#### [FDD - E-DCH Radio Link Handling:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH RL Indication* IE in the *RL Information* IE:]

- [FDD The Node B shall setup the E-DCH resources, as requested or as configured in the Node B communication context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The Node B may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE

and the Node B may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]

- [FDD The Node B shall remove the E-DCH resources, if any, on the Radio Links, that are indicated by the *E-DCH RL Indication* set to "Non E-DCH".]
- [FDD For each RL for which the *E-DCH RL Indication* IE is set to "E-DCH", and which has or can have a common generation of E-RGCH information with another RL (current or future) when the Node B would contain the E-DCH serving RL, the Node B shall include the *E-DCH RL Set ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The value of the *E-DCH RL Set ID* IE shall allow the RNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

#### [FDD - Serving E-DCH Radio Link Change:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [FDD If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.]
- [FDD If the New Serving E-DCH RL is in this Node B:]
  - [FDD The Node B may allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The Node B may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD The Node B may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the new serving E-DCH RL.]
- [FDD The Node B may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every E-DCH Radio Links in the Node B.]

## [FDD - E-DCH Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE, then:]

- [FDD If the *E-DCH FDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH HARQ Power Offset FDD* IE in the *E-DCH FDD Information To Modify* IE for an E-DCH MAC-d flow the Node B shall use this information for calculating the unquantised gain factor for an E-TFC ( $\beta_{ed,j,uq}$ ) as defined in [10].]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message contains the E-DCH Grant Type and it is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the E-DCH Grant Type and it is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the Node B shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When an logical channel is deleted, all its associated configuration data shall also removed.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information To Modify* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the Node B shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the Node B shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the Node B shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this Node B, the Node B may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the Node B shall allocate resources according to the new/changed configuration and include the new/changed configuration in the E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Reference Power Offset* IE, then the Node B may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Power Offsetfor Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the Node B may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE in the *E-DCH FDD Information To Modify* IE, the Node B shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to [32]. If SixteenQAM UL Operation is deactivated, then the Node B shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to [32].]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH DL Control Channel Grant Information* IE in the *E-DCH FDD Information To Modify* IE, the Node B may modify E-AGCH Channelisation Code, E-RGCH/E-HICH Channelisation Code, E-RGCH Signature Sequence and/or E-HICH Signature Sequence for the E-DCH RL indicated by the *E-DCH RL ID* IE. The Node B shall then report the modified configuration which is used in the new configuration specified in the *E-DCH FDD DL Control Channel Information* IE for each E-DCH RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### [FDD - E-DCH MAC-d Flow Addition/Deletion:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]

#### [TDD - Intra-Node B Serving E-DCH Radio Link Change:]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [TDD In the new configuration the Node B shall de-allocate the E-DCH resources of the old Serving E-DCH Radio Link and allocate the E-DCH resources for the new Serving E-DCH Radio Link.]
- [TDD The Node B shall allocate E-AGCH parameters [1.28Mcps TDD and E-HICH parameter] corresponding to the E-DCH and include the *E-AGCH Specific Information Response TDD* IE [1.28Mcps TDD and *E-HICH Specific Information Response TDD* IE]in the *E-DCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [TDD - If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related MAC-d flow.]

#### [TDD - E-PUCH Handling]:

[3.84Mcps TDD and 7.68Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-PUCH Information* IE, the Node B shall apply the parameters to the new configuration.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-PUCH Information LCR* IE, the Node B shall apply the parameters to the new configuration.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-TFCS Information TDD* IE, the Node B shall apply the beta parameters to the new configuration.]

## [3.84Mcps TDD - E-DCH Setup]:

[3.84Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information* IE and *E-DCH Non-scheduled Grant Information TDD* IE if there are to be non-scheduled grants.]

## [1.28Mcps TDD - E-DCH Setup]:

[1.28Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information LCR* IE and *E-DCH Non-scheduled Grant Information LCR TDD* IE if there are to be non-scheduled grants.]

## [7.68Mcps TDD - E-DCH Setup]:

[7.68Mcps TDD - the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information 7.68Mcps* IE and *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE if there are to be non-scheduled grants.]

#### [TDD - E-DCH MAC-d Flow Addition/Deletion:]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining non-scheduled E-DCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the non-scheduled E-DCH configuration from the Node B Communication Context and release the non-scheduled E-DCH resources [1.28 Mcps TDD - and the related Signature Sequence of the Non-scheduled E-HICH].]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add* IE, then if the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.]

## [3.84Mcps TDD - E-DCH Non-scheduled allocations:]

[3.84Mcps TDD - If the *E-DCH Non-scheduled Grant Information TDD* IE is present in the RADIO LINK RECONFIGURATION REQUEST message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

#### [1.28Mcps TDD - E-DCH Non-scheduled allocations:]

[1.28Mcps TDD - If the *E-DCH Non-scheduled Grant Information LCR TDD* IE is present in the RADIO LINK RECONFIGURATION REQUEST message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

### [7.68Mcps TDD - E-DCH Non-scheduled allocations:]

[7.68Mcps TDD - If the *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE is present in the RADIO LINK RECONFIGURATION REQUEST message the Node B shall assume that non-scheduled transmissions will take place according to the parameters in the information element.]

# [TDD - E-DCH Modification:]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the [3.84Mcps TDD - *E-DCH TDD Information* IE] [1.28Mcps TDD - *E-DCH TDD Information LCR* IE] [7.68Mcps TDD - *E-DCH TDD Information 7.68Mcps* IE], then:]

- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH TDD Maximum Bitrate* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH TDD Maximum Bitrate 7.68Mcps* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] includes the *E-DCH Processing Overload Level* IE, then if the Node B could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the Node B shall notify the RNC by initiating the Radio Link Failure procedure.]
- [TDD If the [3.84Mcps TDD *E-DCH TDD Information* IE] [1.28Mcps TDD *E-DCH TDD Information LCR* IE] [7.68Mcps TDD *E-DCH TDD Information 7.68Mcps*IE]includes the *E-DCH Power Offset for Scheduling Info* IE, then the Node B shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE, then the Node B shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the  $\emph{E-DCH TDD Information To Modify}$  IE, then:]

- [TDD If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the Node B shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the Node B shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the Node B shall use this information to set the retransmissions timer.]

- [TDD If the *E-DCH TDD Information To Modify* IE message includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the Node B shall use this new power offset value.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the Node B shall use this information for the related resource allocation operation.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Grant Type* IE, the Node B shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the Node B shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the Node B shall use this information to modify the indicated logical channels:]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the Node B shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the Node B shall apply the value in the new configuration.]
- [TDD If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE in the *E-DCH TDD Information To Modify* IE, then the Node B shall use this value to determine whether MAC-e Reset is performed in the UE for sending the HARQ Failure Indication.]

## [1.28Mcps TDD - Power Control GAP:]

[1.28Mcps TDD - If the *Power Control GAP* IE is included in the RADIO LINK RECONFIGURATION REQUEST message, the Node B may use the value for the power control for HS-SCCH and HS-SICH according to the [21].]

#### General

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *HS-DSCH Information* IE, *HS-DSCH Information To Modify Unsynchronised* IE, *HS-DSCH MAC-d Flows To Add* IE, [FDD -*RL Specific E-DCH Information* IE] [TDD - *E-DCH MAC-d Flows to Add* IE, *E-DCH TDD Information to Modify* IE] or in the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included], or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included], being added or any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] or MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1 and in [24], subclause 5.8.3.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for a DCH or an E-DCH MAC-d flow being added, then the Node B shall not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH or an E-DCH MAC-d flow being added and:]

- [FDD if the Node B establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH or E-DCH MAC-d flow being established.]
- [FDD if the Node B does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the Node B shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION RESPONSE message.]

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iub interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the DCH [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] in the set of coordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

[FDD - In the case of an E-DCH RL being combined with another E-DCH RL within the Node B, the *E-DCH FDD Information Response* IE shall be included only for one of the combined E-DCH RLs.]

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has sent the RADIO LINK RECONFIGURATION RESPONSE message via the old Communication Control Port.

# 8.3.5.3 Unsuccessful Operation

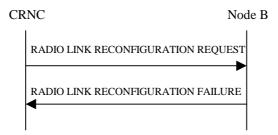


Figure 35: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be set-up, it shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

## **Radio Network Layer Cause**

- CM not supported
- [FDD Continuous Packet Connectivity DTX-DRX operation not available]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available]
- [FDD MIMO not available]
- E-DCH MAC-d PDU Size Format not available

- [FDD SixtyfourQAM DL and MIMO Combined not available]
- [FDD Multi Cell operation not available.]

#### **Transport Laver Cause**

- Transport Resources Unavailable

#### Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

#### 8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD - If the concerned Node B Communication Context is configured to use DPCH in the downlink and if the *RL Information* IE contains the *DL Code Information* IE and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number* IEs not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Unsynchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-Static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IEs, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Indexed MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use MAC-d PDU Size Index, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Fixed MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use Maximum MAC-d PDU Size Extended, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned Node B Communication Context is configured to use "Flexible MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use MAC-d PDU Size List, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-DSCH Information* IE and if the *Measurement Power Offset* IE is not present, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the concerned Node B Communication Context is configured to use F-DPCH in the downlink and if the *RL Information* IE contains the *DL Code Information* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.]

[FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message, but the *E-DPCH Information* IE is not present, or if any of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE, *E-TFCS Information* IE, *E-TTI* IE, *E-DPCCH Power Offset* IE, *HS-DSCH Configured Indicator* IE, are not present in the *E-DPCH Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If any the *HS-DSCH Configured Indicator* IE, of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE or *E-TTI* IE are present in the *E-DPCH Information* IE and the *E-DCH FDD Information* IE is not present in the RADIO LINK RECONFIGURATION REQUEST message, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes one of the *Not Used* IEs, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the Node B Communication Context is not configured for E-DCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the E-DCH FDD Information IE but no E-DCH RL Indication IE set to "E-DCH", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-PDSCH RL ID* IE and/or the *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the new configuration but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as 'HS-DSCH not configured' then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE or *E-DCH MAC-d Flows To Delete* IE in addition to the *E-DCH FDD Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE, *E-DCH MAC-d Flows To Delete* IE and the Node B Communication Context is not configured for E-DCH, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE deleting the last remaining E-DCH Logical Channel of an E-DCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes *E-DCH FDD Information* IE and the E-DCH is already configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[TDD - if the radio link was not previously configured to support E-DCH, then if the RADIO LINK RECONFIGURATION REQUEST message includes one of the following E-DCH information elements then it shall contain all of them otherwise the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.: *E-DCH Serving RL* IE, [3.84Mcps TDD and 7.68Mcps - *E-PUCH Information* IE, *E-TFCS Information TDD* IE], [1.28Mcps TDD - *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE], *E-DCH MAC-d Flows to Add* IE, and [3.84Mcps TDD - *E-DCH TDD Information* IE] [1.28Mcps TDD - *E-DCH TDD Information LCR* IE] [7.68Mcps TDD - *E-DCH TDD Information 7.68Mcps* IE].]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE in addition to the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE in addition to the *Continuous Packet Connectivity HS-SCCH less Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE while the Continuous Packet Connectivity HS-SCCH less configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity *DTX-DRX* configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *DRX Information To Modify* IE in *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity DRX configuration isn"t configured in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only" but no *Transport Format Set* IE for the uplink for this DCH and the Node B had ignored the configuration of Transport Format Set for uplink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only" but no *Transport Format Set* IE for the downlink for this DCH and the Node B had ignored the configuration of Transport Format Set for downlink, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH but does not contain the corresponding *DCH ID* IE and the *Unidirectional DCH indicator* IE set to "Uplink DCH only" for the DCH in *DCH Information To Add* IE, the Node B shall reject the procedure using the the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to apply UL DPCCH Slot Format 0 or 2 and execute Continuous Packet Connectivity DTX-DRX operation, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to apply MIMO or allowed to apply 64 QAM but is not configured to use flexible MAC-d PDU Size, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Reconf Req* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains an *Additional HS Cell Information RL Reconf Req* IE and the concerned Node B Communication Context is configured to apply MIMO, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH in the *RL Specific DCH Information* IE but does not include the *DCH ID* IE for the DCH in the *DCHs to Add* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but the concerned Node B Communication Context is not previously configured to use F-DPCH, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the concerned Node B Communication Context is configured to have the Serving E-DCH Radio Link but there is at least one E-DCH MAC-d flow which the Transport Bearer is not configured in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH for a specific RL and the specific RL is combined with existing RL which the transport bearer is established for the DCH in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

# 8.3.6 Radio Link Deletion

#### 8.3.6.1 General

The Radio Link Deletion procedure is used to release the resources in a Node B for one or more established radio links towards a UE.

The Radio Link Deletion procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

# 8.3.6.2 Successful Operation

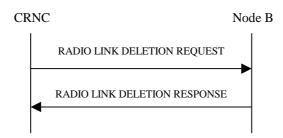


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID* IE, *Node B Communication Context ID* IE and *CRNC Communication Context ID* IE and release all associated resources and respond to the CRNC with a RADIO LINK DELETION RESPONSE message.

[FDD - After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio links of the RL Set and the UL in-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.]

# 8.3.6.3 Unsuccessful Operation

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## 8.3.6.4 Abnormal Conditions

If the RL indicated by the *RL ID* IE, *Node B Communication Context ID* IE and *CRNC Communication Context ID* IE does not exist, the Node B shall respond with the RADIO LINK DELETION RESPONSE message and use the *CRNC Communication Context ID* IE received in the RADIO LINK DELETION REQUEST message.

# 8.3.7 Downlink Power Control [FDD]

## 8.3.7.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more Radio Links used for the related UE-UTRAN connection within the Node B. The Downlink Power Control procedure may be initiated by the CRNC at any time when the Node B Communication Context exists, irrespective of other ongoing CRNC initiated dedicated NBAP procedures towards this Node B Communication Context. The only exception occurs when the CRNC has requested the deletion of the last RL via this Node B, in which case the Downlink Power Control procedure shall no longer be initiated.

# 8.3.7.2 Successful Operation



Figure 37: Downlink Power Control procedure, Successful Operation

The procedure is initiated by the CRNC sending a DL POWER CONTROL REQUEST message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The *Power Adjustment Type* IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is "Common", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Common". As long as the Power Balancing Adjustment Type of the Node B Communication Context is set to "Common", the Node B shall perform the power adjustment (see below) for all existing and future radio links associated with the context identified by the *Node B Communication Context ID* IE and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is "Individual", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "Individual". The Node B shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Powers per RL. If the Power Balancing Adjustment Type of the Node B Communication Context was set to "Common" before this message was received, power balancing on all radio links not addressed by the DL POWER CONTROL REQUEST message shall remain to be executed in accordance with the existing power balancing parameters which are now considered RL individual parameters. Power balancing will not be started on future radio links without a specific request.

If the value of the *Power Adjustment Type* IE is "None", the Power Balancing Adjustment Type of the Node B Communication Context shall be set to "None" and the Node B shall suspend on going power adjustments for all radio links for the Node B Communication Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the Node B shall activate inner loop DL power control for all radio links for the Node B Communication Context. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the Node B shall deactivate inner loop DL power control for all radio links for the Node B Communication Context according to ref. [10].

#### **Power Adjustment**

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see ref. [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1 - r)(P_{ref} + P_{P-CPICH} - P_{init})$$
 with an accuracy of  $\pm 0.5$  dB

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE,  $P_{ref}$  is the value of the *DL Reference Power* IE,  $P_{P-CPICH}$  is the power used on the primary CPICH,  $P_{init}$  is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode,  $P_{init}$  shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the CRNC.

The power adjustments shall be started at the first slot of a frame with CFN modulo the value of *Adjustment Period* IE equal to 0 and shall be repeated for every adjustment period and shall be restarted at the first slot of a frame with CFN=0, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted.

## 8.3.7.3 Abnormal Conditions

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# 8.3.8 Dedicated Measurement Initiation

## 8.3.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on dedicated resources in a Node B.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1 except when the *Node B Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message is set to the reserved value "All NBCC".

If the *Node B Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message is set to the reserved value "All NBCC", the Dedicated Measurement Initiation procedure may be initiated by the CRNC at any time when the Node B Communication Context exists.

# 8.3.8.2 Successful Operation

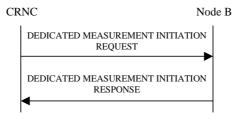


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the Node B Communication Context.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the DEDICATED MEASUREMENT INITIATION REQUEST message. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on "All NBCC".

If the *Node B Communication Context ID* IE equals the reserved value "All NBCC", the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD, 7.68Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5]. The initiation of the measurement for a Node B Communication Context may be delayed until the Reconfiguration CFN has elapsed if either a Prepared Reconfiguration exists or a Prepared Reconfiguration no longer exists but the Reconfiguration CFN has not yet elapsed.

If the Dedicated Measurement Object Type is indicated as being "RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Links.

[FDD - If the Dedicated Measurement Object Type is indicated as being "RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all current and future Radio Links within the Node B Communication Context.]

[TDD - If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the Node B Communication Context, provided the measurement type is applicable to the respective DPCH.]

[FDD - If the Dedicated Measurement Object Type is indicated as being "ALL RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD - If the *DPCH ID* IE or *DPCH ID 7.68Mcps* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE, *HS-SICH ID* IE, *DPCH ID 7.68Mcps* IE and no *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for one existing physical channel per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this physical channel.]

[TDD - If the *PUSCH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

[TDD - If the *HS-SICH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

[TDD - If the *Dedicated Measurement Type* IE is set to "HS-SICH reception quality", the Node B shall initiate measurements of the failed, missed and total HS-SICH transmissions on all of the HS-SICH assigned to this Node B Communication Context. If either the failed or missed HS-SICH transmission satisfies the requested report characteristics, the Node B shall report the result of both failed and missed transmission measurements along with the total number of transmissions.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the DEDICATED MEASUREMENT REPORT message or in the DEDICATED MEASUREMENT INITIATION RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand". The reported CFN shall be the CFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25].

[FDD - If the *Number Of Reported Cell Portions* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message, the value shall be used to determine how many *Cell Portion ID* IEs and *SIR Value* IEs shall be included in *Best Cell Portions* IE in the DEDICATED MEASUREMENT REPORT message or in the DEDICATED MEASUREMENT INITIATION RESPONSE message.]

#### **Report characteristics**

The Report Characteristics IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "On Demand" and if the *CFN* IE is not provided, the Node B shall return the result of the measurement immediately. If the *CFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Periodic", the Node B shall periodically initiate the Dedicated Measurement Report procedure for this measurement, with the requested report frequency. If the *CFN* IE is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Event A", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event B", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event C", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "Event D", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the falling time specified by the *Measurement Change Time* IE has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to "Event E", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the Node B shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "Event F", the Node B shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the

Node B shall also initiate the Dedicated Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Dedicated Measurement Reporting procedure (Report B) as well as terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the Node B shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to "On Demand", the Node B is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object for which a measurement is defined exists anymore, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

#### Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

 $F_n$  is the updated filtered measurement result

 $F_{n-1}$  is the old filtered measurement result

 $M_n$  is the latest received measurement result from physical layer measurements, the unit used for  $M_n$  is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for Fn)

 $a = 1/2^{(k/2)}$ , where k is the parameter received in the *Measurement Filter Coefficient IE*. If the *Measurement Filter Coefficient IE* is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter,  $F_0$  is set to  $M_1$  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.

[FDD - If the *Alternative Format Reporting Indicator* IE is set to "Alternative format is allowed" in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE message.]

#### **Interaction with Reset Procedure:**

If a measurement has been requested with the *Node B Communication Context ID* IE set to "All NBCC", the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

# 8.3.8.3 Unsuccessful Operation

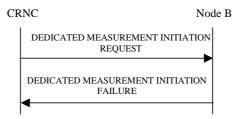


Figure 39: Dedicated Measurement Initiation procedure: Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a DEDICATED MEASUREMENT INITIATION FAILURE message using the Communication Control Port assigned to the Node B Communication Context. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

In the case where the *Node B Communication Context ID* IE is set to "All NBCC" the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION FAILURE shall be set to the value "All CRNCCC", which is reserved for this purpose.

Typical cause values are as follows:

## Radio Network Layer cause

- Measurement not supported for the object
- Measurement Temporarily not Available

#### **Miscellaneous Cause**

- O&M Intervention
- Control processing overload
- HW failure

## 8.3.8.4 Abnormal Conditions

The allowed combinations of the Dedicated Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

**Dedicated Report Characteristics Type** Measurement On Periodic **Event Event Event Event Event Event** On Type Modification **Demand** B C D Ε F Α SIR X Χ X Χ Χ Χ SIR Error Х Х Х X Х X X **Transmitted Code** X X X X X X Power RSCP X Χ Χ Χ Χ Χ Χ Χ Rx Timing Χ Χ Χ Χ Χ Χ Deviation Round Trip Time X Χ Χ Χ Χ Χ X X **Rx Timing** Χ Χ Χ Χ Χ Χ Deviation LCR **HS-SICH** reception Χ Χ Χ Χ X Χ quality **Best Cell Portions** Angle Of Arrival X Χ LCR Rx Timing Χ Χ Χ Χ X Χ Deviation 7.68Mcps **Rx Timing** Χ Χ Χ Χ Χ X Deviation 3.84Mcps Extended

Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Dedicated Measurement Object Type received in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

If the *CFN* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic" or "On Demand", the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

# 8.3.9 Dedicated Measurement Reporting

## 8.3.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Dedicated Measurement Initiation procedure. The Node B may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link, as long as the Node B Communication Context exists.

## 8.3.9.2 Successful Operation



Figure 40: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Dedicated Measurement Reporting procedure. The DEDICATED MEASUREMENT REPORT message shall use the Communication Control Port assigned to the Node B Communication Context. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the Node B may include measurement values for

multiple objects in the DEDICATED MEASUREMENT REPORT message. Unless specified below, the meaning of the parameters are given in other specifications.

The *Measurement ID* IE shall be set to the Measurement ID provided by the CRNC when initiating the measurement with the Dedicated Measurement Initiation procedure.

[TDD - In the case that the measurement was performed on a particular HS-SICH, the Node B shall include the *HS-SICH ID* IE that indicates which HS-SICH was measured.]

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]) or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the Measurement not available shall be reported. If the Node B was configured to perform the Measurement Recovery Behavior, the Node B shall indicate Measurement Available to the CRNC when the achieved measurement accuracy again fulfils the given accuracy requirement (see ref. [22] and [23]) and include the *Measurement Recovery Report Indicator* IE in the DEDICATED MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

[FDD - If the *Alternative Format Reporting Indicator* IE was set to "Alternative format is allowed" in the DEDICATED MEASUREMENT INITIATION REQUEST message setting up the measurement to be reported, the Node B may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT REPORT message.]

# 8.3.9.3 Abnormal Conditions

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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

# 8.3.11 Dedicated Measurement Failure

## 8.3.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. The Node B is allowed to initiate the DEDICATED MEASUREMENT FAILURE INDICATION message at any time after having sent the RADIO LINK SETUP RESPONSE message, as long as the Node B Communication Context exists.

# 8.3.11.2 Successful Operation



Figure 42: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the Communication Control Port assigned to the Node B Communication Context, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

If the failed measurement was initiated with the *Node B Communication Context ID* IE set to the reserved value "All NBCC" and the Node B has terminated the measurement reporting of the measurement corresponding to the Measurement ID indicated in the DEDICATED MEASUREMENT FAILURE INDICATION message, the *CRNC Communication Context ID* IE shall be set to the value "All CRNCCC".

## 8.3.11.3 Abnormal Conditions

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# 8.3.12 Radio Link Failure

# 8.3.12.1 General

This procedure is used by the Node B to indicate a failure in one or more Radio Links [FDD - or Radio Link Sets][TDD or CCTrCHs within a Radio Link].

The Node B may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

# 8.3.12.2 Successful Operation

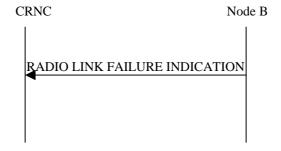


Figure 43: Radio Link Failure procedure, Successful Operation

When the Node B detects that one or more Radio Link(s) [FDD - or Radio Link Set(s)] [TDD - or CCTrCHs within a Radio Link] are no longer available, it sends the RADIO LINK FAILURE INDICATION message to the CRNC

indicating the failed Radio Link(s) or Radio Link Set(s) or CCTrCHs with the most appropriate cause values in the *Cause* IE. The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

If the failure concerns one or more individual Radio Link(s), the Node B shall indicate the affected Radio Link(s) using the *RL Information* IE. [FDD - If the failure concerns one or more Radio Link Set(s), the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE.] [TDD - If the failure concerns only the failure of one or more CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID* IE.]

When the Radio Link Failure procedure is used to notify the loss of UL synchronisation of a [FDD - Radio Link Set] [TDD - Radio Link or CCTrCHs within a Radio Link] on the Uu interface, the RADIO LINK FAILURE INDICATION message shall be sent, with the *Cause* IE set to "Synchronisation Failure", when indicated by the UL out-of-sync algorithm defined in [10] and [21]. [FDD - The algorithms in [10] shall use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE, and the minimum value of the parameters N\_INSYNC\_IND, that are configured in the cells supporting the radio links of the RL Set.]

[FDD - When the Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Link(s) / Radio Link Set(s) due to the occurrence of an UL or DL frame with more than one transmission gap caused by one or more compressed mode pattern sequences, the DL transmission shall be stopped and the RADIO LINK FAILURE INDICATION message shall be sent with the cause value "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link(s)/Radio Link Set(s) from the Node B Communication Context or the Node B Communication Context itself.]

[FDD - When the Radio Link Failure Procedure is used to indicate E-DCH non serving cell processing issue, the RADIO LINK FAILURE INDICATION shall be sent, with the *Cause* IE set to "Not enough user plane processing resources".]

In the other cases, the Radio Link Failure procedure is used to indicate that one or more Radio Link(s)/Radio Link Set(s) are permanently unavailable and cannot be restored. After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the Node B shall not remove the Radio Link/Radio Link Set from the Node B Communication Context or the Node B Communication Context itself. When applicable, the retention priorities associated with the transport channels shall be used by the Node B to prioritise which Radio Link(s)/Radio Link Set(s) to indicate as unavailable to the CRNC.

Typical cause values are:

#### **Radio Network Layer Causes:**

- Synchronisation Failure
- Invalid CM settings

#### **Transport Layer Causes:**

- Transport Resources Unavailable

#### **Miscellaneous Causes:**

- Control Processing Overload
- HW Failure
- O&M Intervention
- Not enough user plane processing resources

#### 8.3.12.3 Abnormal Conditions

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#### 8.3.13 Radio Link Restoration

#### 8.3.13.1 General

This procedure is used by the Node B to notify the achievement and re-achievement of uplink synchronisation of one or more [FDD - Radio Link Sets][TDD - Radio Links or CCTrCHs within a Radio Link] on the Uu interface.

The Node B may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

#### 8.3.13.2 Successful Operation



Figure 44: Radio Link Restoration procedure, Successful Operation

The Node B shall send the RADIO LINK RESTORE INDICATION message to the CRNC when indicated by the UL synchronisation detection algorithm defined in ref. [10] and [21] [FDD -, or when the *Fast Reconfiguration Mode* IE has been included in the RADIO LINK RECONFIGURATION COMMIT message and the Node B has detected that the UE has changed to the new configuration. The algorithm in ref. [10] shall use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.] The message shall use the Communication Control Port assigned to the concerned Node B Communication Context.

[TDD - If the re-established Uu synchronisation concerns one or more individual Radio Links, the Node B shall indicate the affected Radio Link(s) using the *RL Information* IE.] [TDD - If the re-established Uu synchronisation concerns one or more individual CCTrCHs within a radio link, the Node B shall indicate the affected CCTrCHs using the *CCTrCH ID* IE.] [FDD - If the re-established Uu synchronisation concerns one or more Radio Link Set(s), the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE.]

[FDD - The Node B shall send the RADIO LINK RESTORE INDICATION message when the E-DCH processing issue condition has ceased.]

#### 8.3.13.3 Abnormal Condition

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## 8.3.14 Compressed Mode Command [FDD]

#### 8.3.14.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the Node B for one Node B Communication Context.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

#### 8.3.14.2 Successful Operation



Figure 47: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the CRNC sending a COMPRESSED MODE COMMAND message to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

The Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CM Configuration Change CFN* IE requested by the CRNC when receiving the COMPRESSED MODE COMMAND message from the CRNC. From that moment on, all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions (if present) shall be started when the indicated *TGCFN* IE elapses. The *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value.

If the values of the *CM Configuration Change CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CM Configuration Change CFN* IE.

If the concerned Node B Communication Context is configured to use F-DPCH in the downlink, the Node B shall 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 Node B shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per [23], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the Node B shall assume that the reported value is in the non-negative range as per [23], and the value is equal to the *Primary CCPCH RSCP* IE. The Node B should use the indicated value for HS-DSCH scheduling and transmit power adjustment.

#### 8.3.15.3 Abnormal Conditions

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#### 8.3.16 Radio Link Pre-emption

#### 8.3.16.1 General

This procedure is started by the Node B when resources need to be freed.

The Node B may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

#### 8.3.16.2 Successful Operation

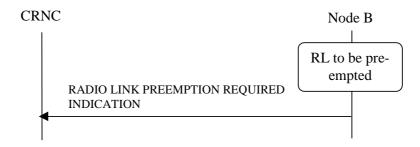


Figure 47B: Radio Link Pre-emption procedure, Successful Operation

When the Node B detects that a one or more Radio Links should be pre-empted (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the CRNC using the Communication Control Port assigned to the concerned Node B Communication Context.

If all Radio Links for a CRNC Communication Context ID should be pre-empted, the *RL Information* IE shall be omitted. If one or several but not all Radio Links should be pre-empted for a CRNC Communication Context, the Radio Links that should be pre-empted shall be indicated in the *RL Information* IE. The Radio Link(s) that should be pre-empted should be deleted by the CRNC.

#### 8.3.16.3 Abnormal Conditions

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## 8.3.17 Bearer Re-arrangement

#### 8.3.17.1 General

This procedure is started by the Node B when Bearers for the Node B Communication Context need to be rearranged.

The Node B may initiate the Bearer Rearrangement procedure at any time after establishing a Radio Link.

#### 8.3.17.2 Successful Operation

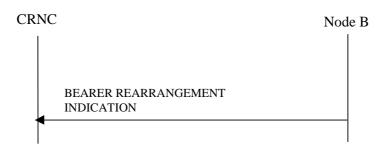


Figure 47C: Bearer Re-arrangement Indication, Successful Operation

When the Node B detects that a signaling bearer or a transport bearer or both need to be re-arranged for the Node B Communication Context, it shall send the BEARER REARRANGEMENT INDICATION message to the CRNC. The message shall use the Communication Control Port assigned for this Node B Communication Context.

If the signaling bearer for the control of the Node B Communication Context needs to be rearranged, the *Signalling Bearer Requested Indicator* IE shall be included in the BEARER REARRANGEMENT INDICATION message.

If the transport bearer for a transport channel needs to be rearranged, the ID of the transport channel for which a new transport bearer is required, shall be included in the BEARER REARRANGEMENT INDICATION message.

#### 8.3.17.3 Abnormal Conditions

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#### 8.3.18 Radio Link Activation

#### 8.3.18.1 General

This procedure is used to activate or de-activate the DL transmission on the Uu interface regarding selected RLs.

#### 8.3.18.2 Successful Operation



Figure 47D: Radio Link Activation procedure

This procedure is initiated by sending the RADIO LINK ACTIVATION COMMAND message from the CRNC to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context. Upon reception, the Node B shall for each concerned RL:

- if the Delayed Activation Update IE indicates "Activate":
  - if the *Activation Type* IE equals "Unsynchronised":
    - [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].]
    - [TDD start transmission on the new RL immediately as specified in [16].]

- if the *Activation Type* IE equals "Synchronised":
  - [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]
- [FDD the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH or on the F-DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or power balancing is activated. During this period no inner loop power control shall be performed and, unless activated by the DL POWER CONTROL REQUEST message, no power balancing shall be performed. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and downlink power balancing adjustments (see subclause 8.3.7).]
- [TDD the Node B shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu interface is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]
- [FDD if the *Propagation Delay* IE and optionally the *Extended Propagation Delay* IE are included, the Node B may use this information to speed up the detection of UL synchronisation on the Uu interface.]
- [FDD if the *First RLS Indicator* IE is included, it indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC Pattern 01 Count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]
- if the Delayed Activation Update IE indicates "Deactivate":
  - stop DL transmission immediately, if the *Deactivation Type* IE equals "Unsynchronised", or at the CFN indicated by the *Deactivation CFN* IE, if the *Deactivation Type* IE equals "Synchronised".

#### 8.3.18.3 Abnormal Conditions

[FDD - If the *Delayed Activation Update* IE is included in the RADIO LINK ACTIVATION COMMAND message, it indicates "Activate" and the *First RLS Indicator* IE is not included, the Node B shall initiate the Error Indication procedure.]

## 8.3.19 Radio Link Parameter Update

#### 8.3.19.1 General

The Radio Link Parameter Update procedure is excuted by the Node B when the update of HS-DSCH [FDD - or E-DCH] related radio link parameter values are needed on the Node B side. With this procedure, Node B can suggest some HS-DSCH [FDD - or E-DCH] related Radio Link Parameter values to RNC.

The Radio Link Parameter Update procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

#### 8.3.19.2 Successful Operation



Figure 48: Radio Link Parameter Update Indication, Successful Operartion

The Node B initiates the Radio Link Parameter Update procedure by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the CRNC. The message contains suggested value(s) of the HS-DSCH [FDD - or E-DCH] related parameter(s) that should be reconfigured on the radio link(s).

If the Node B needs to update HS-DSCH related parameters, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD - HS-DSCH FDD Update Information IE] [TDD - HS-DSCH TDD Update Information IE].

If the Node B needs to allocate new HS-SCCH Codes, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator* IE.

[FDD - If the Node B needs to allocate new HS-PDSCH Codes, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-PDSCH Code Change Indicator* IE.]

[FDD - If the Node B needs to update the CQI Feedback Cycle k, CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle k* IE, *CQI Repetition Factor* IE, *ACK-NACK Repetition Factor* IE, *CQI Power Offset* IE, *ACK Power Offset* IE and/or *NACK Power Offset* IE.]

[FDD - If the Node B needs to update Secondary Serving HS-DSCH related parameters, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Additional HS Cell Information RL Param Upd* IE.]

- [FDD If the Node B needs to allocate new secondary serving HS-SCCH Codes, the Node B shall include the HS-SCCH Code Change Indicator IE in the Additional HS Cell Information RL Param Upd IE.]
- [FDD If the Node B needs to allocate new secondary serving HS-PDSCH Codes, the Node B shall include the *HS-PDSCH Code Change Indicator* IE in the *Additional HS Cell Information RL Param Upd* IE.]

[TDD - If the Node B needs to update the TDD ACK-NACK Power Offset the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including TDD ACK-NACK Power Offset IE.]

[FDD - If the Node B needs to update E-DCH related parameters, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *E-DCH FDD Update Information* IE.]

[FDD - If the Node B needs to update the HARQ process allocation for non-scheduled transmission and/or HARQ process allocation for scheduled Transmission, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *HARQ Process Allocation For 2ms Non-Scheduled Transmission* Grant IE for the concerned MAC-d Flows and/or *HARQ Process Allocation For 2ms Scheduled Transmission* Grant IE.]

[FDD - If the Node B needs to allocate new E-AGCH Channelisation Code, new E-RGCH/E-HICH Channelisation Code, new E-RGCH Signature Sequence and/or new E-HICH Signature Sequence, the Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH DL Control Channel Change Information* IE.]

#### 8.3.19.3 Abnormal Conditions

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## 8.4 Error Handling Procedures

#### 8.4.1 Error Indication

#### 8.4.1.1 General

The Error Indication procedure is initiated by a node in order to report detected errors in one incoming message, provided they cannot be reported by an appropriate response message.

#### 8.4.1.2 Successful Operation

When the conditions defined in subclause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node.

In case the Error Indication procedure was triggered by a dedicated procedure, the following applies:

- When the ERROR INDICATION message is sent from a Node B to its CRNC, the *CRNC Communication Context ID* IE shall be included in the message if the corresponding Node B Communication Context, addressed by the *Node B Communication Context ID* IE which was received in the message triggering the Error Indication procedure, exists;
- When the ERROR INDICATION message is sent from a CRNC to a Node B, the *Node B Communication Context ID* IE shall be included in the message if the corresponding CRNC Communication Context, addressed by the *CRNC Communication Context ID* IE which was received in the message triggering the Error Indication procedure, exists;
- When the message triggering the Error Indication procedure is received in the Node B and there is no Node B
   Communication Context as indicated by the Node B Communication Context ID IE, the Node B shall include
   the unknown Node B Communication Context ID IE from the received message in the ERROR INDICATION
   message, unless another handling is specified in the procedure text for the affected procedure.
- When the message triggering the Error Indication procedure is received in the CRNC and there is no CRNC Communication Context as indicated by the *CRNC Communication Context ID* IE, the CRNC shall include the unknown *CRNC Communication Context ID* IE from the received message in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause* IE, or the *Criticality Diagnostics* IE or both the *Cause* IE and the *Criticality Diagnostics* IE.

Typical cause values for the ERROR INDICATION message are:

#### **Protocol Causes:**

- Transfer Syntax Error
- Abstract Syntax Error (Reject)
- Abstract Syntax Error (Ignore and Notify)
- Message not Compatible with Receiver State
- Unspecified



Figure 49: Error Indication procedure (Node B to CRNC): Successful Operation



Figure 50: Error Indication procedure (CRNC to Node B), Successful Operation

#### 8.4.1.3 Abnormal Conditions

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# 9 Elements for NBAP communication

# 9.1 Message Functional Definition and Contents

#### 9.1.1 General

Subclause 9.1 presents the contents of NBAP messages in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, where the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in ref. [26].

# 9.1.2 Message Contents

#### 9.1.2.1 Presence

An information element can be of the following types:

M	IEs marked as Mandatory (M) shall always be included in the message.
0	IEs marked as Optional (O) may or may not be included in the message.
С	IEs marked as Conditional (C) shall be included in a message only if the condition is satisfied.
	Otherwise the IF shall not be included.

In case of an Information Element group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. The presence

field of the Information Elements inside one group defines if the Information Element is mandatory, optional or conditional if the group is present.

#### 9.1.2.2 Criticality

Each Information Element or Group of Information Elements may have a criticality information applied to it. Following cases are possible:

_	No criticality information is applied explicitly.
YES	Criticality information is applied. "YES" is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information.
	"GLOBAL" is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign
	different criticality values to the repetitions. "EACH" is usable only for repeatable information elements.

## 9.1.2.3 Range

The Range column indicates the allowed number of copies of repetitive IEs.

#### 9.1.2.4 Assigned Criticality

This column provides the actual criticality information as defined in subclause 10.3.2, if applicable.

# 9.1.3 COMMON TRANSPORT CHANNEL SETUP REQUEST

# 9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
CHOICE Common Physical Channel To Be Configured	М				YES	ignore
>Secondary CCPCH						
>>Secondary CCPCH		1			_	
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>FDD SCCPCH Offset	М		9.2.2.15	Corresponds to [7]: S-CCPCH,k	_	
>>>DL Scrambling Code	C-PCH		9.2.2.13		_	
>>>FDD DL Channelisation Code Number	М		9.2.2.14		_	
>>>TFCS	М		9.2.1.58	For the DL.	_	
>>>Secondary CCPCH Slot Format	М		9.2.2.43	If Extended Secondary CCPCH Slot Format IE is present, this IE shall be ignored	-	
>>>TFCI Presence	C- SlotFormat or 3.84Mcps TDD IMB		9.2.1.57	Refer to TS [7]	-	
>>>Multiplexing Position	М		9.2.2.23		_	
>>>Power Offset Information		1			_	
>>>P01	М		Power Offset 9.2.2.29	Power offset for the TFCI bits	-	
>>>P03	М		Power Offset 9.2.2.29	Power offset for the pilot bits	-	
>>>STTD Indicator	М		9.2.2.48		_	
>>>FACH Parameters		0 <maxno ofFACHs&gt;</maxno 			GLOBAL	reject
>>>Common Transport Channel ID	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 Power	М		DL Power 9.2.1.21	Maximum allowed power on the FACH.	_	
>>>>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			3.2.1.03	ignored if	120	ignore
Address				bearer		
				establishment		
				with ALCAP.		
>>>>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
/// TINE QUO			3.2.1.30A	ignored if	120	ignore
				bearer		
				establishment		
				with ALCAP.		
>>>>Broadcast	0		9.2.1.5C	With 7 (EO) (II.	YES	ignore
Reference			0.200		0	.g
>>>>IP Multicast	0		9.2.1.108		YES	ignore
Indication			0.2.1.100		120	ignore
>>>PCH Parameters		01			YES	reject
>>>Common	М		9.2.1.14		_	. 5,550
Transport Channel ID						
>>>>Transport Format	М		9.2.1.59	For the DL.	_	
Set				1 2 3 3 2 2 3		
>>>ToAWS	М		9.2.1.61		_	
>>>>ToAWE	М		9.2.1.60		_	
>>>>PCH Power	М		DL Power		_	
			9.2.1.21			
>>>PICH		1			_	
Parameters						
>>>>Common	М		9.2.1.13		_	
Physical Channel ID						
>>>>FDD DL	М		9.2.2.14		_	
Channelisation Code						
Number						
>>>>PICH Power	М		9.2.1.49A		_	
>>>>PICH Mode	М		9.2.2.26	Number of PI	_	
				per frame		
>>>>STTD	М		9.2.2.48		_	
Indicator						
>>>>Binding ID	0		9.2.1.4	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>>Transport Layer	0		9.2.1.63	Shall be	YES	ignore
Address				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
				ignored if		
				bearer		
				establishment		
				with ALCAP.		
>>>MICH Parameters		01			YES	reject
>>>>Common	М		9.2.1.13		_	
Physical Channel ID						
>>>FDD DL	М		9.2.2.14		_	

Channelisation Code						
Number						
>>>MICH Power	M		PICH Power		_	
			9.2.1.49A			
>>>MICH Mode	M		9.2.2.21D	Number of NI per frame	_	
>>>STTD Indicator	М		9.2.2.48		_	
>>>FDD S-CCPCH Frame Offset	0		9.2.2.14B		YES	reject
>>>Modulation Power Offset	0		9.2.2.91	Used for MBSFN operation and 3.84Mcps TDD MBSFN IMB operation only	YES	reject
>>>Extended Secondary CCPCH Slot Format	0		9.2.2.92	Used for MBSFN operation only	YES	reject
>>>IMB Parameters	0		9.2.2.115	Used for 3.84Mcps TDD MBSFN IMB operation only	YES	reject
>PRACH						
>>PRACH		1			_	
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>Scrambling Code Number	М		9.2.2.42		-	
>>>TFCS	М		9.2.1.58	For the UL.	_	
>>>Preamble Signatures	М		9.2.2.31		_	
>>>Allowed Slot Format Information		1 <maxno ofSlotForm atsPRACH &gt;</maxno 			_	
>>>RACH Slot Format	М		9.2.2.37		_	
>>>RACH Sub Channel Numbers	М		9.2.2.38		_	
>>>Puncture Limit	М		9.2.1.50	For the UL	_	
>>>Preamble Threshold	М		9.2.2.32			
>>>RACH Parameters		1			YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>Transport Format Set	М		9.2.1.59	For the UL.	_	
>>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore

				ignored if bearer establishment with ALCAP.		
>>>AICH Parameters		1			_	
>>>Common Physical Channel ID	M		9.2.1.13		_	
>>>AICH Transmission Timing	М		9.2.2.1		_	
>>>FDD DL Channelisation Code Number	М		9.2.2.14		_	
>>>AICH Power	М		9.2.2.D		_	
>>>STTD Indicator	М		9.2.2.48		_	
>Not Used			NULL	This choice shall not be used. Reject procedure if received.		

Condition	Explanation
SlotFormat or 3.84Mcps TDD IMB	The IE shall be present if the Secondary CCPCH Slot Format IE is set to
-	any of the values from 8 to 17 or if the IMB Parameters IE is included.
PCH	The IE shall be present if the PCH Parameters IE is not present.

Range Bound	Explanation
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary
	CCPCH
maxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

# 9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
CHOICE Common Physical	М				YES	ignore
Channel To Be Configured						
>Secondary CCPCHs						
>>SCCPCH CCTrCH ID	M		CCTrCH ID 9.2.3.3	For DL CCTrCH supporting one or several Secondary	-	
>>TFCS	M		9.2.1.58	CCPCHs For DL CCTrCH supporting one or several Secondary CCPCHs	_	
>>TFCI Coding	М		9.2.3.22		_	
>>Puncture Limit	М		9.2.1.50		_	
>>CHOICE HCR or LCR	M			See note 1	_	
or 7.68 Mcps				below		
>>>3.84Mcps TDD					_	
>>>>Secondary CCPCH		1 <maxno ofSCCPC Hs&gt;</maxno 		See note 2 below	GLOBAL	reject
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>TDD Channelisation Code	М		9.2.3.19		_	
>>>>Time Slot	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		_	
>>>>TFCI Presence	0		9.2.1.57		YES	notify
>>>1.28Mcps TDD					_	
>>>>Secondary CCPCH LCR		1 <maxno ofSCCPC HsLCR&gt;</maxno 		See note 2 below	GLOBAL	reject
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>TDD Channelisation Code	М		9.2.3.19a		_	

COR	LCR						
LCR		M		923241			
Shift LCR   M		IVI	1	3.2.3.2 <del>4</del> A		_	
Name	>>>>Midamble Shift LCR				TDD, if the cell is operating in MBSFN only mode, the NodeB shall ignore the contents of this	-	
Period		N		02216			
Length	Period					_	
Power   9.2.1.21		M		9.2.3.15			
No.   No.		M				_	
Time Slot Format LCR							
Sysymbols   Special Time Slot   LCR	Time Slot Format	M		DPCH Time Slot Format LCR		-	
No.   No.	Special Time Slot LCR	O		LCR Extension	Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The Time Slot LCR IE for the Secondary CCPCH LCR shall be ignored if this IE	YES	ignore
CCPCH 7.68 Mcps         ofSCCPC Hs768>           >>>>>Common Physical Channel ID 768Mcps         M         9.2.3.33         -           >>>>>TDD Channelisation Code 7.68Mcps         M         9.2.3.34         -           >>>>Time Slot         M         9.2.3.23         -           >>>>>TFCI Presence         O         9.2.1.57         -           >>>>>Midamble Shift And Burst Type 7.68Mcps         M         9.2.3.35         -           >>>>>TDD Physical Channel Offset         M         9.2.3.20         -	>>>7.68 Mcps TDD					_	
Physical Channel ID 768Mcps         9.2.3.34         -           >>>>TDD Channelisation Code 7.68Mcps         9.2.3.23         -           >>>>Time Slot         M         9.2.3.23         -           >>>>TFCI Presence         O         9.2.1.57         -           >>>>Midamble Shift And Burst Type 7.68Mcps         9.2.3.35         -           >>>>>TDD Physical Channel Offset         M         9.2.3.20         -	>>>Secondary CCPCH 7.68 Mcps		ofSCCPC			GLOBAL	reject
>>>>TDD Channelisation Code 7.68Mcps       M       9.2.3.34       -         >>>>Time Slot       M       9.2.3.23       -         >>>>TFCI Presence       O       9.2.1.57       -         >>>>Midamble Shift And Burst Type 7.68Mcps       M       9.2.3.35       -         >>>>TDD Physical Channel Offset       M       9.2.3.20       -	Physical Channel ID	M		9.2.3.33		_	
>>>>TFCI Presence         0         9.2.1.57         -           >>>>Midamble Shift And Burst Type 7.68Mcps         M         9.2.3.35         -           >>>>TDD Physical Channel Offset         M         9.2.3.20         -	>>>>TDD Channelisation Code 7.68Mcps					-	
Presence         9.2.3.35         -           >>>>Midamble         M         9.2.3.35         -           Shift And Burst Type         7.68Mcps         -         -           >>>>TDD Physical Channel Offset         M         9.2.3.20         -	>>>>Time Slot	M					
>>>>Midamble         M         9.2.3.35         -           Shift And Burst Type         7.68Mcps         -         -           >>>>TDD Physical Channel Offset         M         9.2.3.20         -		0		9.2.1.57		_	
Channel Offset	>>>>Midamble Shift And Burst Type 7.68Mcps					-	
	<u> </u>	M		9.2.3.20		_	
		М		9.2.3.16		_	

Period						
>>>>Repetition	М		9.2.3.15		_	
Length						
>>>>SCCPCH	M		DL Power		_	
Power			9.2.1.21			
>>FACH Parameters		0 <maxno ofFACHs&gt;</maxno 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>FACH CCTrCH ID	M		9.2.3.3		_	
>>>Transport Format Set	М		9.2.1.59	For the DL.	_	
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60		_	
>>>Max FACH Power	0		DL Power 9.2.1.21	Applicable to 1.28Mcps TDD only	YES	reject
>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Broadcast Reference	0		9.2.1.5C		YES	ignore
>>>IP Multicast	0		9.2.1.108		YES	ignore
>>PCH Parameters		01			YES	reject
>>>Common Transport Channel ID	М	0	9.2.1.14		-	10,000
>>>PCH CCTrCH ID	М		CCTrCH ID 9.2.3.3		-	
>>>Transport Format Set	М		9.2.1.59	For the DL.	_	
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60		_	
>>>CHOICE HCR or LCR or 7.68Mcps	M			See note 1 below	-	
>>>3.84Mcps TDD				20.014	_	
>>>>PICH		01		1	YES	reject
Parameters		J., ,			'.25	10,000
>>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>>TDD Channelisation Code	М		9.2.3.19		-	
>>>>Time Slot	М		9.2.3.23		_	
	•					1

	1	_	•	1	•	r
>>>>>Midamble Shift And Burst	М		9.2.3.7		_	
Туре	<b>+</b>					
>>>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>>>Repetition Period	М		9.2.3.16		-	
>>>>Repetition Length	М		9.2.3.15		_	
>>>>Paging Indicator Length	М		9.2.3.8		_	
>>>>PICH Power	М		9.2.1.49A		-	
>>>>1.28Mcps TDD		01				:4
Parameters LCR		01			YES	reject
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>>TDD Channelisation Code LCR	М		9.2.3.19a		I	
>>>>Time Slot LCR	M		9.2.3.24A		-	
>>>>Midamble Shift LCR	М		9.2.3.7A		_	
>>>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>>>Repetition Period	М		9.2.3.16		_	
>>>>Repetition Length	М		9.2.3.15		_	
>>>>Paging Indicator Length	М		9.2.3.8		_	
>>>>PICH Power	М		9.2.1.49A		-	
>>>>Second TDD Channelisation Code LCR	М		TDD Channelisat ion Code LCR 9.2.3.19a		-	
>>>>TSTD Indicator	0		9.2.1.64		YES	reject
>>>7.68Mcps TDD					_	
>>>>PICH Parameters		01			YES	reject
	1.4	+	0.0.00			
>>>>Common Physical Channel ID 768Mcps	М		9.2.3.33		_	
>>>>TDD Channelisation Code 7.68Mcps	М		9.2.3.34		-	
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst	M		9.2.3.35		-	
Type 7.68Mcps >>>>TDD	M		9.2.3.20		_	
///// 100	1 141	1	0.2.0.20	1		l .

Physical Channel Offset						
>>>>Repetition Period	М		9.2.3.16		_	
>>>>Repetition	М		9.2.3.15		_	
Length >>>>Paging	M		9.2.3.8		_	
Indicator Length >>>>PICH	M		9.2.1.49A		_	
Power						
>>>PCH Power	0		DL Power 9.2.1.21	Applicable to 1.28Mcps TDD only	YES	reject
>>>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>TSTD Indicator	0		9.2.1.64		YES	reject
>>MICH Parameters		01			YES	reject
>>>Common Physical Channel ID	M		9.2.1.13		_	
>>>TDD Physical Channel Offset	M		9.2.3.20		_	
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>Notification Indicator Length	М		9.2.3.7Aa		_	
>>>MICH Power	М		PICH Power 9.2.1.49A		_	
>>>CHOICE HCR or LCR or 7.68 Mcps	М				_	
>>>3.84Mcps TDD						
>>>>MICH		1			_	
Parameters HCR						
>>>>TDD Channelisation Code	M		9.2.3.19		_	
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst Type	M		9.2.3.7		_	
>>>>1.28Mcps TDD						
>>>>MICH Parameters LCR		1			_	
>>>>TDD Channelisation	М		9.2.3.19a		-	

Code LCR						
>>>>Time Slot	M		9.2.3.24A		_	
LCR	IVI		3.2.3.2 <del>4</del> A		_	
>>>>Midamble Shift LCR	M		9.2.3.7A	For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, the NodeB shall ignore the contents of this	I	
-				IE.		
>>>>Second TDD Channelisation Code LCR	М		TDD Channelisat ion Code LCR 9.2.3.19a		_	
>>>>TSTD Indicator	M		9.2.1.64		_	
>>>>>MBSFN Special Time Slot LCR	0		Time Slot LCR Extension 9.2.3.24B	Only for 1.28 Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The Time Slot LCR IE for the MICH parameters LCR shall be ignored if this IE appears.	YES	ignore
>>>7.68 Mcps TDD						
>>>>MICH Parameters 7.68 Mcps		1			ŀ	
>>>>>TDD Channelisation Code 7.68Mcps	M		9.2.3.34		-	
>>>>Time Slot	M		9.2.3.23		_	
>>>>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35		-	
>>Modulation	0		9.2.1.87	Applicable to 3.84Mcps TDD and 7.68Mcps TDD in MBSFN operation only	YES	reject
>>Time Slot Configuration LCR		07		Applicable to 1.28Mcps TDD for MBSFN. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Time Slot Parameter ID	M		Cell Parameter ID 9.2.3.4		-	
>>UARFCN	0		9.2.1.65	Corresponds to	YES	reject

	1		1	_		
				Nt [15]		
				This IE		
				indicates the		
				frequency of		
				the Secondary		
				-		
				Frequency on		
				which SCCPCH		
				is configured.		
				Applicable to		
				1.28Mcps TDD		
				MBSFN. Not		
				Applicable to		
				3.84Mcps TDD		
				or 7.68Mcps		
				TDD.		
>PRACH						
>>CHOICE HCR or LCR	М			See note 1	_	
or 7.68 Mcps				below		
>>>3.84Mcps TDD				201011	_	
>>>>PRACH	<del> </del>	1			YES	roinet
	N 4	ı	9.2.1.13		YES	reject
>>>>Common	M		ಶ.∠.۱.13		_	
Physical Channel ID	1		0.04.50			
>>>>TFCS	M		9.2.1.58		_	
>>>>Time Slot	M		9.2.3.23		-	
>>>>TDD	М		9.2.3.19		_	
Channelisation Code						
>>>>Max PRACH	М		9.2.3.6		_	
	IVI		0.2.0.0			
Midamble Shifts			00011			
>>>>PRACH	М		9.2.3.14		_	
Midamble						
>>>>RACH		1			YES	reject
>>>>Common	M		9.2.1.14		_	
Transport Channel						
ID .						
>>>>Transport	М		9.2.1.59	For the UL	_	
Format Set			3.2.1.00	. 0. 1.0 0		
			0.2.4.4	Shall be	VE0	
>>>>Binding ID	0		9.2.1.4	i snaii be		
	i .				YES	ignore
				ignored if	YES	ignore
				ignored if bearer	YES	ignore
				ignored if	YES	ignore
				ignored if bearer	YES	ignore
>>>>>Transport	0		9.2.1.63	ignored if bearer establishment with ALCAP.		
>>>>>Transport	0		9.2.1.63	ignored if bearer establishment with ALCAP. Shall be	YES	ignore
>>>>Transport Layer Address	0		9.2.1.63	ignored if bearer establishment with ALCAP. Shall be ignored if		
	0		9.2.1.63	ignored if bearer establishment with ALCAP. Shall be ignored if bearer		
	0		9.2.1.63	ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment		
Layer Address				ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP.	YES	ignore
	0		9.2.1.63 9.2.1.58A	ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be		
Layer Address				ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Layer Address				ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be	YES	ignore
Layer Address				ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if	YES	ignore
Layer Address				ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment	YES	ignore
Layer Address  >>>>TNL QoS				ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer	YES	ignore
Layer Address  >>>>TNL QoS  >>>1.28Mcps TDD		1 emayno		ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment	YES YES	ignore
Layer Address  >>>>TNL QoS		1 <maxno< td=""><td></td><td>ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment</td><td>YES</td><td>ignore</td></maxno<>		ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment	YES	ignore
Layer Address  >>>>TNL QoS  >>>1.28Mcps TDD		ofPRACHL		ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment	YES YES	ignore
>>>>>TNL QoS  >>>>1.28Mcps TDD  >>>>PRACH LCR	0		9.2.1.58A	ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment	YES YES GLOBAL	ignore
>>>>>TNL QoS  >>>1.28Mcps TDD  >>>PRACH LCR  >>>>Common		ofPRACHL		ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment	YES YES	ignore
>>>>>TNL QoS  >>>>1.28Mcps TDD  >>>>PRACH LCR	0	ofPRACHL	9.2.1.58A	ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment with ALCAP. Shall be ignored if bearer establishment signored if bearer establishment	YES YES GLOBAL	ignore

LCR							
Channelisation Code   LCR		М		9.2.3.24A		_	
Shift LCR	Channelisation Code LCR	М		9.2.3.19a		-	
Sysystate   System   System		М		9.2.3.7A		_	
Name	>>>>RACH		1			YES	reject
Format Set	Transport Channel ID			9.2.1.14		-	
ignored if bearer   establishment   with ALCAP.	•	M		9.2.1.59	For the UL	_	
Layer Address   ignored if bearer   establishment   with ALCAP.	>>>>Binding ID	0		9.2.1.4	ignored if bearer establishment	YES	ignore
ignored if bearer   establishment   with ALCAP.		0		9.2.1.63	ignored if bearer establishment	YES	ignore
Nt [15]. This IE   indicates the   frequency of   the secondary   frequency on   which PRACH   to be set up.   See note 3   below.	>>>>TNL QoS	0		9.2.1.58A	ignored if bearer establishment		ignore
Note	>>>>UARFCN	O		9.2.1.65	Nt [15]. This IE indicates the frequency of the secondary frequency on which PRACH to be set up. See note 3	YES	reject
Normal	>>>7.68 Mcps TDD					-	
No.	-		1				reject
No.   No.	>>>>Common Physical Channel ID 768Mcps	М	·			-	. 0,000
No.   No.		М				_	
Channelisation Code   7.68Mcps   9.2.3.6   -	>>>>Time Slot	М				_	
>>>>>Max PRACH Midamble Shifts         M         9.2.3.6         -           >>>>PRACH Midamble         M         9.2.3.14         -           >>>>RACH         1         YES rejet           >>>>>Common Transport Channel ID         M         9.2.1.14         -	>>>>TDD Channelisation Code	М				-	
Midamble         1         YES         reje           >>>>>Common Transport Channel ID         M         9.2.1.14         -	>>>>Max PRACH Midamble Shifts					-	
>>>>Common M 9.2.1.14 – Transport Channel ID	Midamble	IVI		9.2.3.14		_	
Transport Channel ID			1			YES	reject
Transport M 0.2.4.50 For the III	Transport Channel	M		9.2.1.14		_	
	>>>>Transport	М		9.2.1.59	For the UL	-	

Format 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
>>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>FPACH		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>TDD Channelisation Code LCR	М		9.2.3.19a		_	
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		_	
>>>Max FPACH Power	М		9.2.3.5E		_	
>>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] This IE indicates the frequency of Secondary Frequency on which FPACH to be set up.	YES	reject
>PLCCH				1.28 Mcps TDD only	YES	ignore
>>Max PLCCH Power	М		DL Power 9.2.1.21		_	
>>Common Physical Channel ID >>TDD Channelisation	M		9.2.1.13		_	
>>TDD Channelisation Code >>Time Slot LCR	M		9.2.3.19		_	
>>Midamble Shift LCR	M		9.2.3.24A	+		
>= Nildamble Shift LCR >E-RUCCH	M		9.2.3.7A	3.84Mcps TDD only	YES	ignore
>>Common Physical Channel ID	М		9.2.1.13		-	
>>Time Slot >>TDD Channelisation	M M		9.2.3.23 9.2.3.19			
Code >>Max E-RUCCH Midamble Shifts	M		9.2.3.44		_	
>>E-RUCCH Midamble	M		9.2.3.14			
>E-RUCCH 7.68Mcps				7.68Mcps TDD only	YES	ignore

>>Common Physical Channel ID 7.68Mcps	M	9.2.3.33	I	
>>Time Slot	M	9.2.3.23	1	
>>TDD Channelisation Code 7.68Mcps	M	9.2.3.34	I	
>>Max E-RUCCH Midamble Shifts	M	9.2.3.44	1	
>>E-RUCCH Midamble	M	9.2.3.14	_	

- Note 1: This information element is a simplified representation of the ASN.1. The choice is in reality performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.
- Note 2: This information element is a simplified representation of the ASN.1. Repetitions 1 to 8 and repetitions 9 to maxnoofSCCPCHs / maxnoofSCCPCHsLCR are represented by separate ASN.1 structures.
- Note 3: The configured PRACH resources on secondary frequency shall only be used for E-DCH random access.

Range Bound	Explanation
maxnoofSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH for 3.84Mcps TDD
maxnoofSCCPCHsLCR	Maximum number of Secondary CCPCHs per CCTrCH for 1.28Mcps TDD
maxnoofSCCPCHs768	Maximum number of Secondary CCPCHs per CCTrCH for 7.68 Mcps TDD
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH
maxnoofPRACHLCRs	Maximum number of PRACHs LCR that can be defined on a RACH for 1.28Mcps TDD

# 9.1.4 COMMON TRANSPORT CHANNEL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
FACH Parameters Info		0 <maxno ofFACHs&gt;</maxno 		The FACH Parameters may be combined with PCH Parameters	GLOBAL	ignore
>FACH Parameters	М		Common Transport Channel Information Response 9.2.1.14A		-	
PCH Parameters	0		Common Transport Channel Information Response 9.2.1.14A	The PCH Parameters may be combined with FACH Parameters	YES	ignore
RACH Parameters	0		Common Transport Channel Information Response 9.2.1.14A	The RACH Parameters shall not be combined with FACH Parameters or PCH Parameters	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary
	CCPCH[FDD] / a group of Secondary CCPCHs [TDD]

## 9.1.5 COMMON TRANSPORT CHANNEL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	_
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	_
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.6 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

## 9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	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&gt;</maxfa 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>Max FACH Power	0		DL Power	Maximum	_	
			9.2.1.21	allowed power on the FACH.		
>>>ToAWS	0		9.2.1.61		_	
>>>ToAWE	0		9.2.1.60		_	
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer reconfiguration with ALCAP.	YES	ignore
>>PCH Parameters		01			YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	•
>>>PCH Power	0		DL Power 9.2.1.21	Power to be used on the PCH.	_	
>>>ToAWS	0		9.2.1.61		_	
>>>ToAWE	0		9.2.1.60		_	
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer reconfiguration with ALCAP.	YES	ignore
>>PICH Parameters		01			YES	reject
>>>Common Physical Channel ID	М		9.2.1.13			
>>>PICH Power	0		9.2.1.49A		_	
>>MICH Parameters		01			YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>MICH Power	0		PICH Power 9.2.1.49A		_	
>PRACH						
>>PRACH Parameters		0 <maxp RACHCell &gt;</maxp 			GLOBAL	reject

>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>Preamble Signatures	0		9.2.2.31		-	
>>>Allowed Slot Format Information		0 <maxno ofSlotForm atsPRACH &gt;</maxno 			-	
>>>RACH Slot Format	М		9.2.2.37		_	
>>>RACH Sub Channel Numbers	0		9.2.2.38		_	
>>>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer reconfiguration with ALCAP.	YES	ignore
>>AICH Parameters		0 <maxp RACHCell &gt;</maxp 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>AICH Power	0		9.2.2.D		_	
>Not Used			NULL	This choice shall not be used. Reject procedure if received.		

Range Bound	Explanation
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs and AICHs that can be defined in a Cell
maxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH

# 9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
Secondary CCPCH Parameters		01			YES	reject

	M		9.2.3.3	For DL	_	
				CCTrCH		
				supporting one		
				or several		
				Secondary		
				CCPCHs		
>Secondary CCPCHs To		0 <maxno< td=""><td></td><td>See note 1</td><td>GLOBAL</td><td>reject</td></maxno<>		See note 1	GLOBAL	reject
Be Configured		ofSCCPC		below		-
		Hs>				
>>Common Physical Channel ID	М		9.2.1.13		-	
>>SCCPCH Power	0		DL power		_	
			9.2.1.21			
PICH Parameters	+	01	J.Z.1.Z1		YES	reject
>Common Physical	M	01	9.2.1.13		-	rojoot
Channel ID	101		3.2.1.13		_	
>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
		ofFACHs>				-,
>Common Transport	М	_	9.2.1.14		_	
Channel ID						
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60			
>Max FACH Power	0		DL Power	Applicable to	YES	reject
			9.2.1.21	1.28Mcps TDD only		·
>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
				ignored if		Ü
				bearer		
				reconfiguration		
PCH Parameters	+	01		with ALCAP.	YES	roiget
>Common Transport	М	U I	9.2.1.14		120	reject
Channel ID	IVI		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	16,600
>TNL QoS	0		9.2.1.58A	Shall be	YES	ignore
			3.2.1.JOA	ignored if	123	ignote
				bearer		
				reconfiguration		
				with ALCAP.		
					·	
FPACH Parameters		01		Mandatory for	YES	reject
FPACH Parameters		01		1.28Mcps TDD.	YES	reject
FPACH Parameters		01		1.28Mcps TDD. Not Applicable	YES	reject
FPACH Parameters		01		1.28Mcps TDD. Not Applicable to 3.84Mcps	YES	reject
FPACH Parameters		01		1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or	YES	reject
FPACH Parameters		01		1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	YES	reject
>Common Physical	M	01	9.2.1.13	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or	YES -	reject
>Common Physical Channel ID		01		1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	-	reject
>Common Physical Channel ID >Max FPACH Power	M O		9.2.1.13 9.2.3.5E	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	- -	
>Common Physical Channel ID >Max FPACH Power MICH Parameters	0	01	9.2.3.5E	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	-	reject
>Common Physical Channel ID >Max FPACH Power MICH Parameters >Common Physical				1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	- -	
>Common Physical Channel ID >Max FPACH Power  MICH Parameters >Common Physical Channel ID	O M		9.2.3.5E 9.2.1.13	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	- - YES -	
>Common Physical Channel ID >Max FPACH Power MICH Parameters >Common Physical	0		9.2.3.5E 9.2.1.13 PICH	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	- -	
>Common Physical Channel ID >Max FPACH Power  MICH Parameters >Common Physical Channel ID	O M		9.2.3.5E 9.2.1.13 PICH Power	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	- - YES -	
>Common Physical Channel ID >Max FPACH Power  MICH Parameters >Common Physical Channel ID >MICH Power	O M	01	9.2.3.5E 9.2.1.13 PICH	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD	- - YES -	reject
>Common Physical Channel ID >Max FPACH Power  MICH Parameters >Common Physical Channel ID	O M		9.2.3.5E 9.2.1.13 PICH Power	1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	- - YES -	

>Max PLCCH Power	0		DL Power 9.2.1.21		_	
Secondary CCPCH Parameters 7.68Mcps		01		Applicable to 7.68 Mcps TDD only	YES	reject
>CCTrCH ID	М		9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	-	
>Secondary CCPCHs To Be Configured		0 <maxno ofSCCPC Hs768&gt;</maxno 			-	
>>Common Physical Channel ID 7.68Mcps	М		9.2.3.33		-	
>>SCCPCH Power	0		DL power 9.2.1.21		_	
PICH Parameters 7.68Mcps		01		Applicable to 7.68 Mcps TDD only	YES	reject
>Common Physical Channel ID 7.68Mcps	М		9.2.3.33		_	
>PICH Power	0		9.2.1.49A		-	
MICH Parameters 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	reject
>Common Physical Channel ID 7.68Mcps	М		9.2.3.33		ı	
>MICH Power	0		PICH Power 9.2.1.49A		_	
UpPCH Parameters		01	0.2.1.107	Applicable to 1.28Mcps TDD only	YES	reject
>UpPCH Position LCR	0		9.2.3.4Q	This position of UpPCH. For a multi-frequency cell, if this IE is not included in this message, UpP CH in secondary frequency indicated by "UARFCN" shall be deleted.		
>UARFCN	0		9.2.1.65	Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15].	-	

Note 1: This information element is a simplified representation of the ASN.1. Repetitions 1 to 8 and repetitions 9 to maxnoofSCCPCHs are represented by separate ASN.1 structures. Furthermore, maxnoofSCCPCHs has different values in the ASN.1 for each of the two TDD options.

Range Bound	Explanation
maxnoofSCCPCHs	Maximum number of SCCPCHs that can be repeated in a Cell
maxnoofFACHs	Maximum number of FACHs that can be repeated in a Cell
maxnoofSCCPCHs768	Maximum number of SCCPCHs that can be repeated in a Cell at
	7.68Mcps

# 9.1.7 COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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

# 9.1.8 COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.9 COMMON TRANSPORT CHANNEL DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Common Physical Channel ID	M		9.2.1.13	Indicates the Common Physical Channel for which the Common Transport Channels (together with the Common Physical Channel) shall be deleted.	YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Common Physical Channel ID 7.68Mcps	0		9.2.3.33	Included at 7.68 Mcps when the physical channel ID exceeds the range of " Common Physical Channel ID"	YES	reject

## 9.1.10 COMMON TRANSPORT CHANNEL DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	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	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.13 BLOCK RESOURCE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Cause	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.14 UNBLOCK RESOURCE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	ignore

## 9.1.15 AUDIT REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		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	M		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	М		9.2.1.62		_	
End Of Audit Sequence	М		9.2.1.29A		YES	ignore
Indicator  Cell Information		0 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>C-ID	М	<i>B&gt;</i>	9.2.1.9		_	
>Configuration Generation ID	M		9.2.1.16		_	
>Resource Operational State	М		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 	6.26.1	Applicable to FDD only	EACH	ignore
>>Secondary CPICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>Primary CCPCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>BCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore

>Secondary CCPCH Information		0 <maxs CCPCHCe II&gt;</maxs 		See note 1 below	EACH	ignore
>>Secondary CCPCH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>PCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>PICH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>FACH Information		0 <maxfa CHCell&gt;</maxfa 			EACH	ignore
>>FACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		-	
>PRACH Information		0 <maxp RACHCell &gt;</maxp 			EACH	ignore
>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>RACH Information		0 <maxr ACHCell&gt;</maxr 			EACH	ignore
>>RACH Individual Information	M		Common Transport Channel Status Information 9.2.1.14B		-	
>AICH Information		0 <maxp RACHCell &gt;</maxp 		Applicable to FDD only	EACH	ignore
>>AICH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		_	
>Not Used 1	0		NULL	This item shall not be used. Ignore if received.	-	
>Not Used 2	0		NULL	This item shall	_	

Г			T			Т
				not be used.		
				Ignore if		
				received.		
>Not Used 3	0		NULL	This item shall	_	
				not be used.		
				Ignore if		
				received.		
>Not Used 4	0		NULL	This item shall	_	
71101 0004 1			INOLL	not be used.	_	
				Ignore if		
>SCH Information	+			received.	\/=6	
>5CH information	0		Common	TDD Sync	YES	ignore
			Physical	Channel		
			Channel	Applicable to		
			Status	3.84Mcps TDD		
			Information	only		
			9.2.1.13A			
>FPACH Information		0 <maxfp< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfp<>		Applicable to	EACH	ignore
		ACHCell>		1.28Mcps TDD	2,1011	ignore
		7107700112				
>>FPACH Individual	М		Common	only		
Information	IVI				_	
momaton			Physical			
			Channel			
			Status			
			Information			
			9.2.1.13A			
>DwPCH Information	0		Common	Applicable to	YES	ignore
			Physical	1.28Mcps TDD		, and the second
			Channel	only		
			Status	Omy		
			Information			
>HS-DSCH Resources			9.2.1.13A	0 10	EACH	ignoro
Information		0 <maxfr< td=""><td></td><td>See note 2</td><td>EACH</td><td>ignore</td></maxfr<>		See note 2	EACH	ignore
mormation		equencyin		below		
		Cell>				
>>Resource Operational	M		9.2.1.52		_	
State						
>>Availability Status	M		9.2.1.2		_	
>>UARFCN	0		9.2.1.65	Corresponds to	YES	ignore
				Nt [15]		
				Applicable to		
				1.28Mcps TDD		
				when using multiple		
				frequencies.		
>MICH Information	0		Common	nequencies.	YES	icasa
>WIGH IIIIOITHAUOH	10		Physical		YES	ignore
			Channel			
	1		Status			
	1		Information			
	1		9.2.1.13A			
>E-DCH Resources		0 <maxfr< td=""><td></td><td>See note 2</td><td>EACH</td><td>ignore</td></maxfr<>		See note 2	EACH	ignore
Information	1	equencyin		below		_
		Cell>		20.0.1		
>>Resource Operational	М	06117	9.2.1.52	<u> </u>		
State	IVI		g.Z.1.3Z		_	
>>Availability Status	М		9.2.1.2	1	_	
>>UARFCN	0		9.2.1.65	Corresponds to	YES	ignore
			3.2.1.00	Nt [15]		.9.1010
	1			Applicable to		
	1			1.28Mcps TDD		
i	ı	1	1	I I.ZUIVIUPS I DD		I

				when using multiple		
>PLCCH Information		0 <maxpl< th=""><th></th><th>frequencies.  Applicable to</th><th>EACH</th><th>ignore</th></maxpl<>		frequencies.  Applicable to	EACH	ignore
		CCHCell>		1.28Mcps TDD only		
>>PLCCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>Primary CCPCH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68 Mcps 9.2.3.36		YES	ignore
>Secondary CCPCH Information 7.68Mcps		0 <maxs CCPCHCe II768&gt;</maxs 			EACH	ignore
>>Secondary CCPCH Individual Information 7.68 Mcps	M		Common Physical Channel Status Information 7.68 Mcps 9.2.3.36		I	
>PICH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68 Mcps 9.2.3.36		YES	ignore
>PRACH Information 7.68Mcps		0 <maxp RACHCell</maxp 			EACH	ignore
>>PRACH Individual Information 7.68Mcps	М		Common Physical Channel Status Information 7.68 Mcps 9.2.3.36		-	
>SCH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68 Mcps 9.2.3.36	TDD Sync Channel Applicable to 7.68Mcps TDD only	YES	ignore
>MICH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68 Mcps 9.2.3.36		YES	ignore
>E-RUCCH Information		0 <maxe- RUCCHCe II&gt;</maxe- 		3.84Mcps TDD only	EACH	ignore
>>E-RUCCH Individual Information	М		Common		-	

	_	1	T	1		T
			Physical			
			Channel			
			Status			
			Information 9.2.1.13A			
>E-RUCCH Information		0 <maxe-< td=""><td></td><td>7.68Mcps TDD</td><td>EACH</td><td>ignore</td></maxe-<>		7.68Mcps TDD	EACH	ignore
7.68Mcps		RUCCHCe II>		only		
>>E-RUCCH Individual Information 7.68Mcps	М		Common		-	
mornation 7.00Mopo			Physical Channel			
			Status			
			Information			
			7.68 Mcps			
			9.2.3.36			
>UARFCN Information		0 <maxfr< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfr<>		Applicable to	EACH	ignore
LCR		equencyin		1.28Mcps TDD		
		Cell>		when using		
				multiple frequencies.		
>>UARFCN	M		9.2.1.65	Corresponds to	_	
>>Resource Operational				Nt [15]		
State	М		9.2.1.52		_	
>>Availability Status	М		9.2.1.2		-	
>UpPCH Information LCR		0 <maxfr< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfr<>		Applicable to	EACH	ignore
		equencyin		1.28Mcps TDD		
IIA DEON		Cell>		only.		
>>UARFCN	0		9.2.1.65	Mandatory for	_	
				1.28Mcps TDD		
				when using multiple		
				frequencies.		
				Corresponds to		
				Nt [15]		
>>UpPCH Position LCR	М		9.2.3.4Q		_	
>>Resource Operational State	М		9.2.1.52		_	
>>Availability Status	М		9.2.1.2		_	
Communication Control		0 <maxc< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxc<>			EACH	ignore
Port Information		CPinNode B>				9
>Communication Control Port ID	М		9.2.1.15		_	
>Resource Operational State	М		9.2.1.52		_	
>Availability Status	M		9.2.1.2		_	
Local Cell Information		0 <maxlo< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxlo<>			EACH	ignore
		calCellinN ode B>				
>Local Cell ID	М		9.2.1.38		_	
>DL Or Global Capacity	М		9.2.1.20B		_	
Credit >UL Capacity Credit	0		9.2.1.65A			
>Common Channels	M		9.2.1.9A			
Capacity Consumption Law						
>Dedicated Channels	M		9.2.1.20A		_	

Consider Consumention Law			<u> </u>	F	
Capacity Consumption Law >Maximum DL Power		0.04.00			
Capability	0	9.2.1.39		_	
>Minimum Spreading	0	9.2.1.47			
Factor		9.2.1.47		_	
>Minimum DL Power	0	9.2.1.46A	,	_	
Capability		0.2.1.107	•		
>Local Cell Group ID	0	9.2.1.37A		_	
>Reference Clock	0	9.2.3.14A		YES	ignore
Availability					greet
>Power Local Cell Group ID	0	9.2.1.49B		YES	ignore
>HSDPA Capability	0	9.2.1.310	Sa	YES	ignore
>E-DCH Capability	0	9.2.1.70		YES	ignore
>E-DCH TTI2ms Capability	C-	9.2.2.13V	FDD only	YES	ignore
	EDCHCap				
	ability				
>E-DCH SF Capability	C-	9.2.2.13V	V FDD only	YES	ignore
	EDCHCap				
5 BOLLUA BO O	ability	0.0.0.40		\/50	
>E-DCH HARQ Combining	C-	9.2.2.13X	FDD only	YES	ignore
Capability	EDCHCap				
>E-DCH Capacity	ability O	9.2.2.13J	a FDD only	YES	ianoro
Consumption Law		9.2.2.133	a FDD only	150	ignore
>F-DPCH Capability	0	9.2.2.16a	FDD only	YES	ignore
>E-DCH TDD Capacity	0	9.2.3.60	TDD only	YES	ignore
Consumption Law		3.2.3.00	1 DD Offiny	120	ignore
>Continuous Packet	0	9.2.2.64	FDD only	YES	ignore
Connectivity DTX-DRX		0.2.2.0	. 22 0,		ignore
Capability					
>Max UE DTX Cycle	C-DTX-	9.2.2.95	FDD only	YES	ignore
	DRXCapa				9
	bility				
>Continuous Packet	0	9.2.2.65	FDD only	YES	ignore
Connectivity HS-SCCH less					
Capability					
>MIMO Capability	0	9.2.2.70	FDD only	YES	ignore
>SixtyfourQAM DL	0	9.2.1.110		YES	ignore
Capability			1.28Mcps TDD		
MDMO O LITT		0.04.00	only	\/F0	
>MBMS Capability	0	9.2.1.86	EDD and	YES	ignore
>Enhanced FACH	0	9.2.1.114		YES	ignore
Capability			1.28Mcps TDD only		
>Enhanced PCH Capability	C-	9.2.1.115		YES	ignore
>Emilanced 1 Of 1 Oapability	Enhanced	0.2.1.110	1.28Mcps TDD	120	ignore
	FACHCap		only		
	ability		,		
>SixteenQAM UL Capability	0	9.2.2.88	FDD only	YES	ignore
>HS-DSCH MAC-d PDU	0	9.2.1.3110		YES	ignore
Size Capability					
>MBSFN Only Mode	0	9.2.3.71	1.28Mcps TDD	YES	ignore
Capability			only		_
>F-DPCH Slot Format	0	9.2.2.94	FDD only	YES	ignore
Capability	_				_
>E-DCH MAC-d PDU Size	0	9.2.1.74A	١	YES	ignore
Capability		200:5:		\ <u></u>	
>Common E-DCH	0	9.2.2.101	FDD only	YES	Ignore
Capability		0.0.0.400	EDD code	VEO	law
>E-Al Capability	C- CommonE	9.2.2.102	FDD only	YES	Ignore
	DCHCapa				
	bility				
>Enhanced UE DRX	C-	9.2.1.116	FDD only	YES	ignore
Capability	CommonE	3.2.1.110	1 20 only	''-0	ignore
Japaniny	DCHCapa				
	bility				
		L	ı	1	1

>Enhanced UE DRX Capability LCR	0		9.2.1.116	1.28Mcps TDD only	YES	ignore
>E-DPCCH Power Boosting Capability	0		9.2.2.109		YES	ignore
>SixtyfourQAM DL and MIMO Combined Capability	C- SixtyfourQ AMDLand MIMOCap ability		9.2.2.110	FDD only	YES	ignore
>Multi Cell Capability Info	0		9.2.2.113	FDD only	YES	ignore
Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>Local Cell Group ID	М		9.2.1.37A		_	
>DL Or Global Capacity Credit	М		9.2.1.20B		_	
>UL Capacity Credit	0		9.2.1.65A		_	
>Common Channels Capacity Consumption Law	М		9.2.1.9A		ı	
>Dedicated Channels Capacity Consumption Law	М		9.2.1.20A		1	
>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>E-DCH TDD Capacity Consumption Law	0		9.2.3.60	TDD only	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Power Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>Power Local Cell Group ID	М		9.2.1.49B		_	
>Maximum DL Power Capability	М		9.2.1.39		_	

Note 1: This information element is a simplified representation of the ASN.1. [TDD - Repetitions 1 to 8 and repetitions 9 to maxSCCPCHCell are represented by separate ASN.1 structures.] Furthermore, maxSCCPCHCell has different values in the ASN.1 for FDD and for each of the two TDD options.

Note 2: For 1.28Mcps TDD when using multiple frequencies, this information element for Repetition 1 and repetition 2 through maxFrequencyinCell are represented by respective ASN.1 structures with different criticalities.

Condition	Explanation
EDCHCapability	The IE shall be present if the E-DCH Capability IE is set to "E-DCH
	Capable".
EnhancedFACHCapability	The IE shall be present if the Enhanced FACH Capability IE is set to
	"Enhanced FACH Capable".
DTX-DRXCapability	The IE shall be present if the Continuous Packet Connectivity DTX-DRX
	Capability IE is present and set to "Continuous Packet Connectivity
	DTX-DRX Capable".
CommonEDCHCapability	The IE shall be present if the Common E-DCH Capability IE is set to
	"Common E-DCH Capable".
SixtyfourQAMDLandMIMOCapability	The IE shall be present if SixtyfourQAM DL Capability IE is set to
	'SixtyfourQAM DL Capable' and MIMO Capability IE is set to 'MIMO
	Capable'.

Range Bound	Explanation
maxCellinNode B	Maximum number of Cells that can be configured in Node B
maxCCPinNode B	Maximum number of Communication Control Ports that can exist in the Node B
maxLocalCellinNode B	Maximum number of Local Cells that can exist in the Node B
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
maxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
maxSCCPCHCell768	Maximum number of Secondary CCPCHs that can be defined in a Cell
	for 7.68 Mcps TDD.
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs that can be defined in a Cell
maxRACHCell	Maximum number of RACHs that can be defined in a Cell
maxFPACHCell	Maximum number of FPACHs that can be defined in a Cell
maxPLCCHCell	Maximum number of PLCCHs that can be defined in a Cell
maxE-RUCCHCell	Maximum number of E-RUCCHs that can be defined in a Cell
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

#### 9.1.17A AUDIT FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality diagnostics	0	•	9.2.1.17		YES	ignore

## 9.1.18 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	reject
CHOICE Common	M				YES	reject
Measurement Object Type						
>Cell						
>>C-ID	M		9.2.1.9		_	
>>Time Slot	0		9.2.3.23	Applicable to 3.84McpsTDD and 7.68Mcps TDD only	_	
>>Time Slot LCR	0		9.2.3.24A	Applicable to 1.28Mcps TDD only	YES	reject
>>Neighbouring Cell Measurement Information		0 <maxno MeasNCell s&gt;</maxno 			GLOBAL	ignore
>>>CHOICE Neighbouring Cell Measurement Information					_	
>>>>Neighbouring FDD Cell Measurement Information				FDD only		
>>>>Neighbouring FDD Cell Measurement Information	M		9.2.1.47C		_	
>>>Neighbouring TDD Cell Measurement Information				Applicable to 3.84Mcps TDD only		
>>>>Neighbouring TDD Cell Measurement Information	M		9.2.1.47D		_	
>>>>Additional Neighbouring Cell Measurement Information				See Note 1		
>>>>Neighbouring TDD Cell Measurement Information LCR				Applicable to 1.28Mcps TDD only		
>>>>Neighbouri ng TDD Cell Measurement Information LCR	M		9.2.1.47E		YES	reject
>>>>Neighbouring TDD Cell Measurement Information 768Mcps				Applicable to 7.68 Mcps TDD only		
>>>>Neighbouri ng TDD Cell Measurement Information 768Mcps	M		9.2.3.37		YES	reject
>>UARFCN	0		9.2.1.65	Applicable for 1.28 Mcps TDD only	YES	reject

>>UpPCH Position LCR	0		9.2.3.4Q	Applicable to 1.28Mcps TDD only	YES	reject
>>Additional Time Slot LCR		0 <maxfr equencyin Cell – 1&gt;</maxfr 		Applicable to 1.28Mcps TDD only. If the IE present, the measurement type should also be applied to the time slot (s).	GLOBAL	ignore
>>>UARFCN	M		9.2.1.65		_	
>>>Time Slot Initiated LCR		06		If the value is zero, the measurement type should be applied to all time slots in the UARFCN which satisfies the requirement of the measurement type	_	
>>>>Time Slot LCR	M		9.2.3.24A		_	
>RACH				FDD only		
>>C-ID	M		9.2.1.9		_	
>>Common Transport	М		9.2.1.14		_	
Channel ID >Not Used			NULL	This choice shall not be used. Reject procedure if received.		
>Additional Common				See Note 1		
Measurement Object Types >>Power Local Cell					_	
Group						
>>>Power Local Cell Group ID	М		9.2.1.49B	EDDl.	YES	reject
>>E-DCH RACH >>>C-ID	M		9.2.1.9	FDD only	YES	ianoro
Common Measurement Type	M		9.2.1.9		YES	ignore
Measurement Filter	O	1	9.2.1.11		YES	reject reject
Coefficient		1	J.Z. 1.71		''-5	TOJOUL
Report Characteristics	М		9.2.1.51		YES	reject
SFN Reporting Indicator	M		FN Reporting Indicator 9.2.1.29B		YES	reject
SFN	0		9.2.1.53A		YES	reject
Common Measurement Accuracy	0		9.2.1.9B		YES	reject
Measurement Recovery Behavior	0		9.2.1.43A		YES	ignore
RTWP* Reporting Indicator	0		9.2.1.53b		YES	reject
RTWP* for Cell Portion Reporting Indicator	0		9.2.1.53c		YES	reject
Reference Received Total Wide Band Power Reporting	0		9.2.2.39C	FDD only	YES	ignore
GANSS Time ID	C- Measurem entType		INTEGER(0 7,)	Defines the GNSS system time for the UTRAN GANSS Timing	YES	ignore

	of Cell Frames for UE	
	Positioning.	
	Coded as	
	defined in [18].	

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Condition	Explanation
MeasurementType	The IE shall be present if the Common Measurement Type IE is set to "UTRAN
	GANSS Timing of Cell Frames for UE Positioning".

Range Bound	Explanation
maxnoMeasNCells	Maximum number of neighbouring cells that can be measured on.
maxFreguencyinCell – 1	Maximum number of frequencies that can be used in the cell minus 1.

## 9.1.19 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62			
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			0.04.40			
>>Common Measurement Value	M		9.2.1.12		_	
>>Additional Measurement Value		0 <maxfr equencyin Cell – 1&gt;</maxfr 		Applicable to 1.28Mcps TDD only. The Common Measurement Value Information in additional time slot will be reported if the number of Additional Time Slot LCR is not 0 in COMMON MEASUREME NT INITIATION REQUEST.	GLOBAL	ignore
>>>UARFCN	M		9.2.1.65		_	
>>>Time Slot Measurement Value LCR		16			_	
>>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Common Measurement Value	М		9.2.1.12		-	
>RACH				FDD only		
>>Common Measurement	М		9.2.1.12	FDD Only	_	
Value	'*'		0.2.1.12			
>Not Used			NULL	This choice shall not be used.		
>Additional Common Measurement Object Types				See Note 1		
>>Power Local Cell Group					_	
>>>Common	M		9.2.1.12		YES	ignore
Measurement Value	IVI		0.2.1.12	500	120	ignore
>>E-DCH RACH			0.04.46	FDD only	\/F0	
>>>Common Measurement Value	M		9.2.1.12		YES	ignore
SFN	0		9.2.1.53A	Common Measurement Time Reference	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Common Measurement Achieved Accuracy	0		Common Measureme nt Accuracy 9.2.1.9B		YES	ignore

Measurement Recovery	0	9	9.2.1.43C		YES	ignore
Support Indicator						_
Reference Received Total Wide Band Power Support Indicator	0	9	9.2.2.39D	FDD only	YES	ignore
Reference Received Total Wide Band Power	0	9	9.2.2.39B	FDD only	YES	ignore

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range Bound	Explanation					
maxFrequencyinCell – 1	Maximum number of frequencies that can be used in the cell minus 1.					

#### 9.1.20 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M	•	9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.21 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		ı	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Common Measurement Object Type	М			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>Cell >>Common Measurement	M		0.04.404			
>>Common Measurement Value Information	IVI		9.2.1.12A		_	
>>C-ID	0		9.2.1.9		YES	ignore
>>C-ID >>Additional Measurement Value Information	U	0 <maxfr equencyin Cell – 1&gt;</maxfr 	9.2.1.9	Applicable to 1.28Mcps TDD only. The Common Measurement Value Information in additional time slot will be reported if the number of Additional Time Slot LCR is not 0 COMMON MEASUREME NT INITIATION REQUEST.	GLOBAL	ignore
>>>UARFCN			9.2.1.65			
>>>Time Slot Measurement Value LCR		16	0.2.1.00			
>>>>Time Slot LCR	M		9.2.3.24A			
>>>>Common Measurement Value Information	М		9.2.1.12A			
>RACH				FDD only		
>>Common Measurement Value Information	M		9.2.1.12A		_	
>>C-ID	0		9.2.1.9		YES	ignore
>Not Used			NULL	This choice shall not be used.		
>Additional Common	1			See Note 1		
Measurement Object Types >>Power Local Cell					_	
Group >>>Common Measurement Value Information	M		9.2.1.12A		YES	ignore
>E-DCH RACH				FDD only		
>>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	0		9.2.1.43B		YES	ignore

Reporting Indicator						l
Reference Received Total	0	9.2.2.39B	FDD only	YES	ignore	
Wide Band Power			-		_	l

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range Bound	Explanation
maxFrequencyinCell – 1	Maximum number of frequencies that can be used in the cell minus 1.

#### 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	М		9.2.1.62		_	
Measurement ID	М		9.2.1.42		YES	ignore

#### 9.1.23 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

#### 9.1.24 CELL SETUP REQUEST

#### 9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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	М		9.2.1.65	Corresponds to Nd [14]	YES	reject

Maximum Transmission Power	М		9.2.1.40	YES	reject
Closed Loop Timing Adjustment Mode	0		9.2.2.2A	YES	reject
Primary Scrambling Code	M		9.2.2.34	YES	reject
Synchronisation	IVI	1	9.2.2.34	YES	reject
Configuration		,		ILO	reject
>N_INSYNC_IND	М		9.2.1.47A		
>N_OUTSYNC_IND	M		9.2.1.47A 9.2.1.47B		
>T_RLFAILURE	M		9.2.1.56A		
DL TPC Pattern 01 Count	M		9.2.1.30A 9.2.2.13A	YES	reject
Primary SCH Information	IVI	1	9.Z.Z.13A	YES	
>Common Physical	M	1	9.2.1.13	163	reject
Channel ID				_	
>Primary SCH Power	M		DL Power 9.2.1.21	_	
>TSTD Indicator	M		9.2.1.64	_	
Secondary SCH Information		1		YES	reject
>Common Physical	М		9.2.1.13	_	_
Channel ID		<u> </u>			
>Secondary SCH Power	М		DL Power	_	
•			9.2.1.21		
>TSTD Indicator	М		9.2.1.64	_	
Primary CPICH Information		1		YES	reject
>Common Physical	М		9.2.1.13	_	•
Channel ID					
>Primary CPICH power	М		9.2.2.33	_	
>Transmit Diversity	М		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	M		9.2.1.13	_	
Channel ID					
>DL Scrambling Code	M		9.2.2.13	_	
>FDD DL Channelisation	М		9.2.2.14	_	
Code Number					
>Secondary CPICH Power	M		DL Power 9.2.1.21	_	
>Transmit Diversity	М		9.2.2.53		
Indicator	I IVI		3.2.2.33	_	
Primary CCPCH		1		YES	reject
Information		,		120	10,000
>Common Physical	М		9.2.1.13	_	
Channel ID					
>BCH Information		1		_	
>>Common Transport	М		9.2.1.14	_	
Channel ID					
>>BCH Power	М		DL Power 9.2.1.21	_	
>STTD Indicator	М		9.2.2.48	_	
Limited Power Increase	141	1	J.L.L.TU	YES	reject
Information		'		123	10,000
>Power_Raise_Limit	М		9.2.2.29A	_	
>DL_power_averaging_win	M		9.2.2.12A	_	
dow_size			,		
IPDL Parameter Information		01		YES	reject
>IPDL FDD Parameters	М		9.2.2.18C	_	,
>IPDL Indicator	M		9.2.1.36F	_	
Cell Portion Information		0 <maxno ofCellPorti ons&gt;</maxno 		EACH	reject
>Cell Portion ID	M	0110/	9.2.2.1Ca	_	
>Associated Secondary	M		Common		
CPICH	IVI		Physical Channel ID	-	
			9.2.1.13		

>Maximum Transmission Power for Cell Portion	M	Maximum Transmissio n Power 9.2.1.40	-	
MIMO Pilot Configuration	0	9.2.2.73	YES	reject

Range Bound	Explanation
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
MaxNoofCellPortions	Maximum number of Cell Portions in a cell

# 9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	M		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15] For 1.28Mcps TDD, if multiple frequencies exist within the cell indicated by C-ID, this IE indicates the frequency of Primary Frequency.	YES	reject
Cell Parameter ID	M		9.2.3.4	For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE indicates the preamble code used in the MBSFN Special Time Slot [19].	YES	reject
Maximum Transmission Power	М		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26		YES	reject
Sync Case	M		9.2.3.18		YES	reject
Synchronisation Configuration		1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	М		9.2.1.56A		_	
DPCH Constant Value	М		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PUSCH Constant Value	М		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PRACH Constant Value	М		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
Timing Advance Applied	М		9.2.3.22A		YES	reject
SCH Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>CHOICE Sync Case >>Case 1	M				YES	reject
>>>Time Slot >>Case 2	M		9.2.3.23		_	
>>>SCH Time Slot	М		9.2.3.17		_	

>SCH Power	М		DL Power		_	
			9.2.1.21			
>TSTD Indicator	M		9.2.1.64		_	
PCCPCH Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	reject
>Common Physical Channel ID	М		9.2.1.13		-	
>TDD Physical Channel Offset	М		9.2.3.20		-	
>Repetition Period	M		9.2.3.16		_	
>Repetition Length	M		9.2.3.15		_	
>PCCPCH Power	M		9.2.3.9		_	
>SCTD Indicator	М		9.2.3.30		_	
Time Slot Configuration		015		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
>MBSFN Cell Parameter ID	0		Cell Parameter ID 9.2.3.4		YES	reject
Time Slot Configuration LCR		07		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. If multiple frequencies exist within the cell indicated by C-ID, this IE indicates the Time Slot configuration of Primary Frequency.	GLOBAL	reject
>Time Slot LCR	М		9.2.3.24A		_	
>Time Slot Status	М		9.2.3.25		_	
>Time Slot Direction	М		9.2.3.24		_	
>Time Slot Parameter ID	0		Cell Parameter ID 9.2.3.4	Applicable only to MBSFN only mode	YES	reject

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PCCPCH Information LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special Time Slot [19].	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>TDD Physical Channel Offset	М		9.2.3.20		_	
>Repetition Period	M		9.2.3.16		_	
>Repetition Length	M		9.2.3.15		_	
>PCCPCH Power	M		9.2.3.9		_	
>SCTD Indicator	M		9.2.3.30		_	
>TSTD Indicator	M		9.2.1.64		_	
DwPCH Information		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>TSTD Indicator	М		9.2.1.64		_	
>DwPCH Power	M		9.2.3.5B			
Reference SFN Offset	0		9.2.3.14B		YES	ignore
IPDL Parameter Information		01		Applicable to 3.84 Mcps TDD and 7.68 Mcps TDD only	YES	reject
>IPDL TDD Parameters	M		9.2.3.5D		_	
>IPDL Indicator	M		9.2.1.36F		_	
IPDL Parameter Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	М		9.2.3.5H	,	-	
>IPDL Indicator	M		9.2.1.36F		_	

PCCPCH Information 7.68 Mcps TDD		01		Mandatory for 7.68 Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84 Mcps TDD.	YES	reject
>Common Physical Channel ID 7.68 Mcps	М		9.2.3.33		_	
>TDD Physical Channel Offset	М		9.2.3.20		_	
>Repetition Period	М		9.2.3.16		-	
>Repetition Length	М		9.2.3.15		-	
>PCCPCH Power	M		9.2.3.9		1	
>SCTD Indicator	M		9.2.3.30		_	
SCH Information 7.68Mcps TDD		01		Mandatory for 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84Mcps TDD.	YES	reject
>Common Physical Channel ID 7.68Mcps	М		9.2.3.33		1	
>CHOICE Sync Case	М				YES	reject
>>Case 1						
>>>Time Slot	M		9.2.3.23		_	
>>Case 2			0.0047			
>>>SCH Time Slot	M		9.2.3.17		_	
>SCH Power	М		DL Power 9.2.1.21		_	
>TSTD Indicator	M O		9.2.1.64 9.2.3.70		- YES	
MBSFN Only Mode Indicator			-	Mandatory for 1.28Mcps TDD when the cell is operating in MBSFN only mode. Not applicable to FDD, 3.84Mcps TDD or 7.68Mcps TDD		reject
UARFCN Information LCR		0 <maxfreq uencyinCe II-1&gt;</maxfreq 		Mandatory for 1.28Mcps TDD when using multiple frequencies. It indicates the UARFCN and Time Slot configuration information of the Secondary Frequencies. There could be several secondary frequencies	EACH	reject
>UARFCN	М		9.2.1.65	Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency.	-	
>Time Slot Configuration LCR		17		This IE indicates the Time Slot	_	

				configuration of a Secondary Frequency.		
>>Time Slot LCR	M	9.	.2.3.24A		1	
>>Time Slot Status	M	9.	.2.3.25		1	
>>Time Slot Direction	M	9.	.2.3.24		1	
>>Time Slot Parameter ID	0	Pa	ell arameter		YES	reject
		ID   9.	.2.3.4			

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

## 9.1.25 CELL SETUP RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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

# 9.1.26 CELL SETUP FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		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

<b>.</b>			IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Managara Diagrippinatas	M		9.2.1.45			
Message Discriminator					YES	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
C-ID : 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						
>N_INSYNC_IND	M		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	М		9.2.1.56A			_
Primary SCH Information		01			YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>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	M		9.2.2.33		_	
Secondary CPICH Information		0 <maxs CPICHCell &gt;</maxs 			EACH	reject
>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	V.Z.1.21		YES	reject
>IPDL FDD Parameters	0	J 1	9.2.2.18C		-	. 0,000
>IPDL Indicator	M		9.2.1.36F		<u> </u>	
Cell Portion Information		0 <maxno ofCellPorti ons&gt;</maxno 	0.2		EACH	reject
>Cell Portion ID	М	01107	9.2.2.1Ca		_	
>Maximum Transmission Power for Cell Portion	M		Maximum Transmissio n Power 9.2.1.40		-	
MIMO Pilot Configuration	0		9.2.2.73		YES	reject

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	М		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 SCH Information	0	01	9.2.3.22A	Applicable to 3.84Mcps TDD only	YES YES	reject reject
>Common Physical	M		9.2.1.13		_	
Channel ID						
>SCH Power	М		DL Power 9.2.1.21		_	
PCCPCH Information		01		Not applicable to 7.68Mcps TDD only. For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special Time Slot [19].	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>PCCPCH Power	М		9.2.3.9		_	
Maximum Transmission Power	0		9.2.1.40		YES	reject
DPCH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PUSCH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
PRACH Constant Value	0		Constant Value 9.2.3.4A	This IE shall be ignored by the Node B.	YES	reject
Time Slot Configuration		015		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
>MBSFN Cell Parameter ID	0		Cell Parameter ID 9.2.3.4		YES	reject
Time Slot Configuration LCR		07		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or	GLOBAL	reject

T.68Mcps TDD. If multiple frequencies exist within the cell indicated by C-ID, this IE indicated by C-ID, this IE indicates the Time Slot reconfiguration of Primary Frequency.    Time Slot LCR	>Time Slot Status >Time Slot Direction	М			If multiple frequencies exist within the cell indicated by C-ID, this IE indicates the		
	>Time Slot Status >Time Slot Direction	М			frequencies exist within the cell indicated by C-ID, this IE indicates the		
Exist within the cell indicated by C-ID, this IE indicates the Time Slot reconfiguration of Primary Frequency.	>Time Slot Status >Time Slot Direction	М			exist within the cell indicated by C-ID, this IE indicates the		
Cell indicated by C-ID, this IE indicates the Time Slot reconfiguration of Primary Frequency.	>Time Slot Status >Time Slot Direction	М			cell indicated by C-ID, this IE indicates the		
C-ID, this IE indicates the Time Slot reconfiguration of Primary	>Time Slot Status >Time Slot Direction	М			C-ID, this IE indicates the		
C-ID, this IE indicates the Time Slot reconfiguration of Primary	>Time Slot Status >Time Slot Direction	М			C-ID, this IE indicates the		
STime Slot LCR	>Time Slot Status >Time Slot Direction	М			indicates the		
Time Slot teconfiguration of Primary Frequency.	>Time Slot Status >Time Slot Direction	М					
STIME Slot LCR	>Time Slot Status >Time Slot Direction	М			Tillie Siot		
STime Slot LCR	>Time Slot Status >Time Slot Direction	М					
STIME Slot LCR	>Time Slot Status >Time Slot Direction	М					
STime Slot LCR	>Time Slot Status >Time Slot Direction	М					
STime Slot Status	>Time Slot Status >Time Slot Direction	М			Frequency.		
STIME Slot Direction	>Time Slot Direction			9.2.3.24A		_	
STIME Slot Direction	>Time Slot Direction		•	9.2.3.25		_	
DwPCH Information						_	
1.28Mcps TDD   1.28	DWI OII IIIOIIIIIIIII		0.1	0.2.0.2	Applicable to	YES	reject
Scommon Physical Channel ID			07		1.28Mcps TDD	120	10,000
Channel ID         DWPCH Power         M         9.2.3.5B         —           IPDL Parameter Information         01         Applicable to 3.84Mcps TDD and 7.68Mcps TDD and 7.68Mcps TDD only         reject           >IPDL TDD Parameters         0         9.2.3.5D         —           >IPDL Indicator         M         9.2.1.36F         —           IPDL Parameter Information LCR         01         Applicable to 1.28Mcps TDD only         YES         reject           >IPDL TDD Parameters LCR         0         9.2.3.5H         —         —         —           >IPDL Indicator         M         9.2.3.5H         —<	>Common Physical	М		9.2.1.13		_	
SDWPCH Power   M	Channel ID			3.20			
PDL Parameter Information		NA		0 2 2 ED			
3.84Mcps TDD   and 7.68Mcps   TDD only		IVI		y.∠.ა.5B	A 1: 1.1 :		
and 7.68Mcps   TDD only	IPDL Parameter Information		<i>U</i> 1			YES	reject
TDD only							
TDD only							
>IPDL TDD Parameters         O         9.2.3.5D         —           >IPDL Indicator         M         9.2.1.36F         —           IPDL Parameter Information LCR         O1         Applicable to 1.28Mcps TDD only         YES         reject           >IPDL TDD Parameters LCR         O         9.2.3.5H         —         —           >IPDL Indicator         M         9.2.1.36F         —         —           SCH Information 7.68Mcps         O1         Applicable to 7.68Mcps TDD only         YES         reject           >Common Physical Channel ID 7.68Mcps         M         9.2.3.33         —         —           >SCH Power         M         DL Power 9.2.1.21         —         —           PCCPCH Information         O1         Applicable to YES         reject							
N	>IPDL TDD Parameters	0		9.2.3.5D	<del>                                     </del>	_	
IPDL Parameter Information   01							
LCR			0.1	3.2.1.30	Applicable 45	VEC	roio -t
Only   SIPDL TDD Parameters   O   9.2.3.5H   -			0 1			YES	reject
>IPDL TDD Parameters         O         9.2.3.5H         —           LCR         >IPDL Indicator         M         9.2.1.36F         —           SCH Information 7.68Mcps         01         Applicable to 7.68Mcps TDD only         YES         reject           >Common Physical Channel ID 7.68Mcps         M         9.2.3.33         —         —           >SCH Power         M         DL Power 9.2.1.21         —         —           PCCPCH Information         01         Applicable to         YES         reject	LUK						
LCR         JPDL Indicator         M         9.2.1.36F         —           SCH Information 7.68Mcps         01         Applicable to 7.68Mcps TDD only         YES         reject           >Common Physical Channel ID 7.68Mcps         M         9.2.3.33         —         —           >SCH Power         M         DL Power 9.2.1.21         —         —           PCCPCH Information         01         Applicable to         YES         reject		<u> </u>			only		
>IPDL Indicator         M         9.2.1.36F         —           SCH Information 7.68Mcps         01         Applicable to 7.68Mcps TDD only         YES reject           >Common Physical Channel ID 7.68Mcps         M         9.2.3.33         —           >SCH Power         M         DL Power 9.2.1.21         —           PCCPCH Information         01         Applicable to         YES reject	>IPDL TDD Parameters	0		9.2.3.5H	T	_	
SCH Information 7.68Mcps         01         Applicable to 7.68Mcps TDD only         YES         reject           >Common Physical Channel ID 7.68Mcps         M         9.2.3.33         —         —           >SCH Power         M         DL Power 9.2.1.21         —         —           PCCPCH Information         01         Applicable to         YES         reject	LCR						
SCH Information 7.68Mcps         01         Applicable to 7.68Mcps TDD only         YES         reject           >Common Physical Channel ID 7.68Mcps         M         9.2.3.33         —         —           >SCH Power         M         DL Power 9.2.1.21         —         —           PCCPCH Information         01         Applicable to         YES         reject		М		9.2.1.36F		_	
7.68Mcps TDD		1	0 1	5.2.1.551	Annlicable to	YES	reject
Only   Only	3CH IIIIOIIIIation 7.00Micps		0 1			ILS	Тејесі
>Common Physical Channel ID 7.68Mcps         M         9.2.3.33         -           >SCH Power         M         DL Power 9.2.1.21         -           PCCPCH Information         01         Applicable to         YES         reject					- I		
Channel ID 7.68Mcps         DL Power         -           >SCH Power         M         DL Power         -           9.2.1.21         PCCPCH Information         01         Applicable to         YES         reject					only		
>SCH Power         M         DL Power 9.2.1.21         —           PCCPCH Information         01         Applicable to         YES         reject		M		9.2.3.33		_	
PCCPCH Information         9.2.1.21         Applicable to         YES         reject							
PCCPCH Information         01         Applicable to         YES         reject	>SCH Power	M		DL Power		_	
PCCPCH Information         01         Applicable to         YES         reject				9.2.1.21			
	PCCPCH Information		0.1		Applicable to	YES	reject
			01			120	10,000
	7.00MCp3						
One only	Commercial Discost	N.4		0.0.0.00	Unity		
>Common Physical M 9.2.3.33 -		IVI		9.2.3.33		_	
Channel ID 7.68Mcps							
			1	10000	i	_	ĺ
CHOICE UARFON O Applicable to YES reject		M		9.2.3.9			
				9.2.3.9	Applicable to	YES	reiect
	CHOICE UARFCN			9.2.3.9	Applicable to 1.28Mcps TDD	YES	reject
				9.2.3.9	1.28Mcps TDD	YES	reject
	CHOICE UARFCN			9.2.3.9	1.28Mcps TDD when using	YES	reject
	CHOICE UARFCN			9.2.3.9	1.28Mcps TDD when using multiple	YES	reject
	CHOICE UARFCN Adjustment			9.2.3.9	1.28Mcps TDD when using	YES	reject
>>UARFCN Information 1 -	CHOICE UARFCN Adjustment >Add			9.2.3.9	1.28Mcps TDD when using multiple	YES	reject
To Add LCR	CHOICE UARFCN Adjustment		1	9.2.3.9	1.28Mcps TDD when using multiple	YES -	reject
	CHOICE UARFCN Adjustment  >Add >>UARFCN Information		1	9.2.3.9	1.28Mcps TDD when using multiple	YES -	reject
	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies	YES -	reject
	CHOICE UARFCN Adjustment  >Add >>UARFCN Information		1	9.2.3.9	1.28Mcps TDD when using multiple frequencies  Corresponds to	YES -	reject
	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15]	YES	reject
	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE	YES	reject
	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the	YES	reject
	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a	YES	reject
	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary	YES -	reject
add.	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a	YES -	reject
	CHOICE UARFCN Adjustment  >Add  >>UARFCN Information To Add LCR	0	1		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to	YES -	reject
	>Add >>UARFCN Information To Add LCR >>>UARFCN	0			1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to add.	YES -	reject
	>Add >SUARFCN Information To Add LCR >>>UARFCN >>>UARFCN	0	17		1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to add. This IE	YES -	reject
	>Add >>UARFCN Information To Add LCR >>>UARFCN	0			1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to add. This IE indicates the	YES -	reject
Time Slot	>Add >SUARFCN Information To Add LCR >>>UARFCN >>>UARFCN	0			1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to add.  This IE indicates the Time Slot	YES -	reject
Time Slot configuration of	>Add >SUARFCN Information To Add LCR >>>UARFCN >>>UARFCN	0			1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to add.  This IE indicates the Time Slot configuration of	YES -	reject
Time Slot	>Add >SUARFCN Information To Add LCR >>>UARFCN >>>Time Slot	0			1.28Mcps TDD when using multiple frequencies  Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to add.  This IE indicates the Time Slot configuration of a Secondary	YES -	reject

				add.		
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>>Time Slot Status	М		9.2.3.25		_	
>>>Time Slot Direction	М		9.2.3.24		-	
>Modify						
>>UARFCN Information To Modify LCR		1 <maxfreq uencyinCe II-1&gt;</maxfreq 		there could be several secondary frequencies	1	
>>>UARFCN	M		9.2.1.65	Corresponds to Nt [15] This IE indicates the frequency of a Secondary Frequency to modify.	I	
>>>Time Slot Configuration LCR		17		This IE indicates the Time Slot reconfiguration of a Secondary Frequency to modify.	-	
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>>Time Slot Status	М		9.2.3.25		_	
>>>>Time Slot Direction	М		9.2.3.24		_	
>Delete >>UARFCN Information To Delete LCR		1			_	
>>>UARFCN	M		9.2.1.65	Corresponds to Nt [15] This IE indicates the frequency of Secondary Frequency to delete.	ŀ	

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

#### 9.1.28 CELL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	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	М		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

#### 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	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CHOICE Indication Type	M				YES	ignore
>No Failure						
>>Local Cell Information		1 <max LocalCellin Node B&gt;</max 			EACH	ignore
>>>Local Cell ID	M		9.2.1.38		_	
>>>Add/Delete Indicator	M		9.2.1.1		_	
>>>DL Or Global	C-add		9.2.1.20B		_	
Capacity Credit						
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	C-add		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	C-add		9.2.1.20A		-	
>>>Maximum DL Power Capability	C-add		9.2.1.39		_	
>>>Minimum Spreading Factor	C-add		9.2.1.47		_	
>>>Minimum DL Power Capability	C-add		9.2.1.46A		_	
>>>Local Cell Group ID	0		9.2.1.37A		_	
>>>Reference Clock Availability	0		9.2.3.14A	TDD only	YES	ignore
>>>Power Local Cell Group ID	0		9.2.1.49B		YES	ignore
>>>HSDPA Capability	0		9.2.1.31Ga		YES	ignore
>>>E-DCH Capability	0		9.2.1.70		YES	ignore
>>>E-DCH TTI2ms Capability	C- EDCHCap ability		9.2.2.13V	FDD only	YES	ignore
>>>E-DCH SF Capability	C- EDCHCap ability		9.2.2.13W	FDD only	YES	ignore
>>>E-DCH HARQ Combining Capability	C- EDCHCap ability		9.2.2.13X	FDD only	YES	ignore
>>>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>>F-DPCH Capability	0		9.2.2.16a	FDD only	YES	ignore
>>>E-DCH TDD Capacity Consumption Law	0		9.2.3.60	TDD only	YES	ignore
>>>Continuous Packet Connectivity DTX-DRX Capability	0		9.2.2.64	FDD only	YES	ignore
>>>Max UE DTX Cycle	C-DTX- DRXCapa bility		9.2.2.95	FDD only	YES	ignore
>>>Continuous Packet Connectivity HS-SCCH	0		9.2.2.65	FDD only	YES	ignore

less Capability						
>>>MIMO Capability	0		9.2.2.70	FDD only	YES	ignore
>>>SixtyfourQAM DL	0		9.2.1.110	FDD and	YES	ignore
Capability				1.28Mcps TDD only		J
>>>MBMS Capability	0		9.2.1.86		YES	ignore
>>>Enhanced FACH	0		9.2.1.114	FDD and	YES	ignore
Capability				1.28Mcps TDD only		
>>>Enhanced PCH	C-		9.2.1.115	FDD and	YES	ignore
Capability	Enhanced FACHCap ability			1.28Mcps TDD only		
>>>SixteenQAM UL Capability	0		9.2.2.88	FDD only	YES	ignore
>>>HS-DSCH MAC-d	0		9.2.1.31IC		YES	ignore
PDU Size Capability						-
>>>MBSFN Only Mode	0		9.2.3.71	1.28Mcps TDD	YES	ignore
Capability				only		
>>>F-DPCH Slot	0		9.2.2.94	FDD only	YES	ignore
Format Capability						
>>>E-DCH MAC-d PDU	0		9.2.1.74A		YES	ignore
Size Capability						
>>>Common E-DCH	0		9.2.2.101	FDD only	YES	Ignore
Capability						-
>>>E-AI Capability	C- CommonE DCHCapa bility		9.2.2.102	FDD only	YES	Ignore
>>>Enhanced UE DRX	C-		9.2.1.116	FDD only	YES	ignore
Capability	CommonE DCHCapa bility		0.2	. 22 siny	120	ignore
>>>Enhanced UE DRX	0		9.2.1.116	1.28Mcps TDD	YES	ignore
Capability LCR				only		-
>>>E-DPCCH Power	0		9.2.2.109		YES	ignore
Boosting Capability						-
>>>SixtyfourQAM DL	C-		9.2.2.110	FDD only	YES	ignore
and MIMO Combined Capability	SixtyfourQ AMDLand MIMOCap ability					
>Multi Cell Capability Info	0		9.2.2.113	FDD only	YES	ignore
>>Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>>>Local Cell Group ID	M		9.2.1.37A		_	
>>>DL Or Global Capacity Credit	М		9.2.1.20B		_	
	0		9.2.1.65A		_	
>>>    Canacity Cradit	1 0					
>>>UL Capacity Credit					_	
>>>UL Capacity Credit >>>Common Channels Capacity Consumption Law	M		9.2.1.9A		-	
>>>Common Channels Capacity Consumption					-	
>>>Common Channels Capacity Consumption Law >>>Dedicated Channels Capacity Consumption Law >>>E-DCH Capacity	М		9.2.1.9A	FDD only	- YES	ignore
>>>Common Channels Capacity Consumption Law >>>Dedicated Channels Capacity Consumption Law	M		9.2.1.9A 9.2.1.20A	FDD only TDD only	- YES	ignore ignore

Group Information		calCellinN ode B>				
>>>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 calCellinN ode B&gt;</maxlo 			EACH	ignore
>>>Local Cell ID	М		9.2.1.38		_	
>>>DL Or Global Capacity Credit	0		9.2.1.20B		_	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	0		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	0		9.2.1.20A		-	
>>>Maximum DL Power Capability	0		9.2.1.39		1	
>>>Minimum Spreading Factor	0		9.2.1.47		_	
>>>Minimum DL Power Capability	0		9.2.1.46A		-	
>>>Reference Clock Availability	0		9.2.3.14A	TDD only	YES	ignore
>>>HSDPA Capability	0		9.2.1.31Ga		YES	ignore
>>>E-DCH Capability	0		9.2.1.70		YES	ignore
>>>E-DCH TTI2ms Capability	C- EDCHCap ability		9.2.2.13V	FDD only	YES	ignore
>>>E-DCH SF Capability	C- EDCHCap ability		9.2.2.13W	FDD only	YES	ignore
>>>E-DCH HARQ Combining Capability	C- EDCHCap ability		9.2.2.13X	FDD only	YES	ignore
>>>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>>>F-DPCH Capability	0		9.2.2.16a		YES	ignore
>>>E-DCH TDD  Capacity Consumption  Law	0		9.2.3.60	TDD only	YES	ignore
>>>Continuous Packet Connectivity DTX-DRX Capability	0		9.2.2.64	FDD only	YES	ignore
>>>Max UE DTX Cycle	C-DTX- DRXCapa bility		9.2.2.95	FDD only	YES	ignore
>>>Continuous Packet Connectivity HS-SCCH less Capability	0		9.2.2.65	FDD only	YES	ignore
>>>MIMO Capability	0		9.2.2.70	FDD only	YES	ignore
>>>SixtyfourQAM DL Capability	0		9.2.1.110	FDD and 1.28Mcps TDD only	YES	ignore
>>>MBMS Capability	0		9.2.1.86		YES	ignore
>>>Enhanced FACH	0		9.2.1.114	FDD only and	YES	ignore
Capability				1.28Mcps TDD		

>>>Enhanced PCH	C-		9.2.1.115	FDD only and	YES	ignore
Capability	Enhanced FACHCap ability		3.2.1.110	1.28Mcps TDD	120	ignore
>>>SixteenQAM UL Capability	0		9.2.2.88	FDD only	YES	ignore
>>>HS-DSCH MAC-d PDU Size Capability	0		9.2.1.31IC		YES	ignore
>>MBSFN Only Mode Capability	0		9.2.3.71	1.28Mcps TDD only	YES	ignore
>>F-DPCH Slot Format Capability	0		9.2.2.94	FDD only	YES	ignore
>>>E-DCH MAC-d PDU Size Capability	0		9.2.1.74A		YES	ignore
>>>Common E-DCH Capability	0		9.2.2.101	FDD only	YES	Ignore
>>>E-AI Capability	C- CommonE DCHCapa bility		9.2.2.102	FDD only	YES	Ignore
>>>Enhanced UE DRX Capability	C- CommonE DCHCapa bility		9.2.2.107	FDD only	YES	ignore
>>>Enhanced UE DRX Capability LCR	0		9.2.1.116	1.28Mcps TDD only	YES	ignore
>>>E-DPCCH Power Boosting Capability	0		9.2.2.109		YES	ignore
>>>SixtyfourQAM DL and MIMO Combined Capability	C- SixtyfourQ AMDLand MIMOCap ability		9.2.2.110	FDD only	YES	ignore
>>>Multi Cell Capability	0		9.2.2.113	FDD only	YES	ignore
>>Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>>>Local Cell Group ID	М	545 27	9.2.1.37A		_	
>>>DL Or Global Capacity Credit	0		9.2.1.20B		-	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	0		9.2.1.9A		-	
>>>Dedicated Channels Capacity Consumption Law	0		9.2.1.20A		-	
>>>E-DCH Capacity Consumption Law	0		9.2.2.13Ja	FDD only	YES	ignore
>>>E-DCH TDD Capacity Consumption Law	0		9.2.3.60	TDD only	YES	ignore
>>Communication Control Port Information		0 <maxc CPinNode B&gt;</maxc 			EACH	ignore
>>>Communication Control Port ID	М		9.2.1.15		-	
>>>Resource Operational State	М		9.2.1.52		_	

>>>Availability Status	M	1	9.2.1.2			
>>Cell Information		0 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>>>C-ID	M		9.2.1.9		_	
>>>Resource	0		9.2.1.52		_	
Operational State	_					
>>>Availability Status	0		9.2.1.2		_	
>>>Primary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Primary CPICH Information	0		Common Physical Channel Status Information 9.2.1.13A	FDD only	YES	ignore
>>>Secondary CPICH Information		0 <maxs CPICHCell &gt;</maxs 		FDD only	EACH	ignore
>>>>Secondary CPICH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>Primary CCPCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>BCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>Secondary CCPCH Information		0 <maxs CCPCHCe II&gt;</maxs 		See note 1 below	EACH	ignore
>>>>Secondary CCPCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		_	
>>>PCH Information	0		Common Transport Channel Status Information 9.2.1.14B		YES	ignore
>>>PICH Information	0		Common Physical Channel Status Information		YES	ignore

>>>FACH Information		0 <maxfa< th=""><th>9.2.1.13A</th><th></th><th>EACH</th><th>igno</th></maxfa<>	9.2.1.13A		EACH	igno
>>>FAUTI INIORMATION		CHCell>			LAUIT	igno
>>>FACH Individual	М		Common		_	
Information			Transport			
			Channel			
			Status			
			Information 9.2.1.14B			
>>>PRACH		0 <maxp< td=""><td>0.£.1.17D</td><td></td><td>EACH</td><td>igno</td></maxp<>	0.£.1.17D		EACH	igno
Information		RACHCell >				
>>>>PRACH	М		Common		-	
Individual Information			Physical Channel			
			Status			
			Information			
		0	9.2.1.13A		FACIL	;
>>>RACH Information		0 <maxp RACHCell</maxp 			EACH	igno
		> XACHCell				
>>>>RACH Individual	М		Common		_	
Information			Transport			
			Channel Status			
			Information			
			9.2.1.14B			
>>>AICH Information		0 <maxp< td=""><td></td><td>FDD only</td><td>EACH</td><td>igno</td></maxp<>		FDD only	EACH	igno
		RACHCell >				
>>>>AICH Individual	М		Common		_	
Information			Physical			
			Channel			
			Status			
			Information 9.2.1.13A			
>>>Not Used 1	0		NULL	This item shall	_	
				not be used.		
				Ignore if		
N (11 10	0		NULL	received. This item shall		
>>>Not Used 2	O		NOLL	not be used.	_	
				Ignore if		
				received.		
>>>Not Used 3	0		NULL	This item shall	_	
				not be used.		
				Ignore if received.		
>>>Not Used 4	0		NULL	This item shall	_	
				not be used.		
				Ignore if		
CCU Information	0		Common	received. Applicable to	YES	igno
>>>SCH Information			Physical	3.84Mcps TDD	123	igno
			Channel	only		
			Status			
			Information			
ED A C' '		0 .may.FD	9.2.1.13A	Applicable 4-	EAC!!	
>>>FPACH		0 <maxfp ACHCell&gt;</maxfp 		Applicable to 1.28Mcps TDD	EACH	igno
Information		7.07700112		only		
>>>FPACH	М		Common		_	
Individual Information			Physical			
			Channel Status			
			Information			
			9.2.1.13A			
	0	-	Common	Applicable to	YES	igno

			Physical	1.28Mcps TDD		
			Channel Status Information	only		
>>>HS-DSCH Resources Information		0 <maxfreq uencyinCe II&gt;</maxfreq 	9.2.1.13A	See note 2 below	EACH	ignore
>>>Resource Operational State	М		9.2.1.52		_	
>>>Availability Status	М		9.2.1.2		_	
>>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable to 1.28Mcps TDD when using multiple frequencies.	YES	ignore
>>>MICH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>E-DCH Resources Information		0 <maxfr equencyin Cell&gt;</maxfr 		See note 2 below	EACH	ignore
>>>Resource Operational State	М		9.2.1.52		_	
>>>Availability Status	М		9.2.1.2		_	
>>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable to 1.28Mcps TDD when using multiple frequencies.	YES	ignore
>>>PLCCH Information		0 <maxpl CCHCell&gt;</maxpl 		Applicable to 1.28Mcps TDD only	EACH	ignore
>>>PLCCH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>>>Primary CCPCH Information 7.68Mcps	0		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		YES	ignore
>>>Secondary CCPCH Information 7.68Mcps		0 <maxs CCPCHCe II768&gt;</maxs 			EACH	ignore
>>>Secondary CCPCH Individual Information 7.68Mcps	М		Common Physical Channel Status Information 7.68Mcps 9.2.3.36		-	

	T 0	T		T	\/=0	
>>>PICH Information	0		Common		YES	ignore
7.68Mcps			Physical			
			Channel			
			Status			
			Information			
			7.68Mcps			
		0 5	9.2.3.36		EAGU	
>>>PRACH		0 <maxp< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxp<>			EACH	ignore
Information 7.68Mcps		RACHCell				
	1	>				
>>>>PRACH	M		Common		_	
Individual Information			Physical			
7.68Mcps			Channel			
·			Status			
			Information			
			7.68Mcps			
			9.2.3.36	A malia a la ta	YES	:
>>>SCH Information	0		Common	Applicable to	YES	ignore
7.68Mcps			Physical Channel	7.68Mcps TDD only		
			Status	Offity		
			Information			
			7.68Mcps			
			9.2.3.36			
>>>MICH Information	0	†	Common		YES	ignore
			Physical			.9.1010
7.68Mcps			Channel			
			Status			
			Information			
			7.68Mcps			
			9.2.3.36			
>>>E-RUCCH		0 <maxe-< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxe-<>		Applicable to	EACH	ignore
Information		RUCCHCe		3.84Mcps TDD		J
Illormation		<i>II&gt;</i>		only		
>>>E-RUCCH	M		Common		-	
Individual Information			Physical			
			Channel			
			Status			
			Information			
			9.2.1.13A			
>>>E-RUCCH		0 <maxe-< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxe-<>		Applicable to	EACH	ignore
Information 7.68Mcps		RUCCHCe		7.68Mcps TDD		
	1	<i>II&gt;</i>		only		
>>>E-RUCCH	M		Common		_	
Individual Information			Physical			
7.68Mcps			Channel			
-1 -			Status			
			Information			
			7.68Mcps			
HADEON	-	0 <maxfr< td=""><td>9.2.3.36</td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfr<>	9.2.3.36	Applicable to	EACH	ignore
>>>UARFCN					EACH	ignore
Information LCR		equencyin Cell>		1.28Mcps TDD		
		Gell>		when using		
				multiple frequencies.		
LIADECT	M	+	9.2.1.65	Corresponds to		
>>>UARFCN	IVI		3.2.1.00	Nt [15]	_	
>>>Resource	М	†	9.2.1.52	[]	_	
	141		5.2.1.02			
Operational State	M	+	0242	<del> </del>		
>>>Availability	IVI		9.2.1.2		_	
Status	<u> </u>	1				
>>>>Cause	0		9.2.1.6		_	
>>>UpPCH		0 <maxfr< td=""><td></td><td>Applicable to</td><td>EACH</td><td>ignore</td></maxfr<>		Applicable to	EACH	ignore
	İ	equencyin		1.28Mcps TDD		
Information LCR			1	Looky	i	ı
		Cell>		only.		
Information LCR >>>>UARFCN	0	Cell>	9.2.1.65	Mandatory for 1.28Mcps TDD	_	

				when using multiple frequencies. Corresponds to Nt [15]		
>>>UpPCH Position LCR	М		9.2.3.4Q		_	
>>>Resource Operational State	M		9.2.1.52		1	
>>>Availability Status	M		9.2.1.2		ı	
>>Power Local Cell Group Information		0 <maxlo calCellinN ode B&gt;</maxlo 			EACH	ignore
>>>Power Local Cell Group ID	М		9.2.1.49B		-	
>>>Maximum DL Power Capability	M		9.2.1.39		_	
Cause	0		9.2.1.6		YES	ignore

Note 1: This information element is a simplified representation of the ASN.1. [TDD - Repetitions 1 to 8 and repetitions 9 to maxSCCPCHCell are represented by separate ASN.1 structures.] Furthermore, maxSCCPCHCell has different values in the ASN.1 for FDD and for each of the two TDD options.

Note 2: For 1.28Mcps TDD when using multiple frequencies, this information element for Repetition 1 and repetition 2 through maxFrequencyinCell are represented by respective ASN.1 structures with different criticalities.

Condition	Explanation
add	The IE shall be present if the Add/Delete Indicator IE is set to "Add".
EDCHCapability	The IE shall be present if the E-DCH Capability IE is set to "E-DCH
	Capable".
EnhancedFACHCapability	The IE shall be present if the Enhanced FACH Capability IE is set to
	"Enhanced FACH Capable".
DTX-DRXCapability	The IE shall be present if the Continuous Packet Connectivity DTX-DRX
	Capability IE is present and set to "Continuous Packet Connectivity
	DTX-DRX Capable".
CommonEDCHCapability	The IE shall be present if the Common E-DCH Capability IE is set to
	"Common E-DCH Capable".
SixtyfourQAMDLandMIMOCapability	The IE shall be present if SixtyfourQAM DL Capability IE is set to
	'SixtyfourQAM DL Capable' and MIMO Capability IE is set to 'MIMO
	Capable'.

Range Bound	Explanation
maxLocalCellinNode B	Maximum number of Local Cells that can exist in the Node B
maxCellinNode B	Maximum number of C-IDs that can be configured in the Node B
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.
maxSCCPCHCell	Maximum number of Secondary CCPCHs that can be defined in a Cell.
maxFACHCell	Maximum number of FACHs that can be defined in a Cell
maxPRACHCell	Maximum number of PRACHs and AICHs that can be defined in a Cell
maxCCPinNode B	Maximum number of Communication Control Ports that can exist in the
	Node B
maxFPACHCell	Maximum number of FPACHs that can be defined in a Cell
maxPLCCHCell	Maximum number of PLCCHs that can be defined in a Cell
maxE-RUCCHCell	Maximum number of E-RUCCHs that can be defined in a Cell
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

## 9.1.33 SYSTEM INFORMATION UPDATE REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
BCCH Modification Time	0		9.2.1.3		YES	reject
MIB/SB/SIBInformation		1 <maxib &gt;</maxib 			GLOBAL	reject
>IB Type	М		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.	_	
>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&gt;</maxib 			GLOBAL	reject
>>>IB SG POS	0		9.2.1.33		_	
>>>Segment Type	C- CRNCOrig ination		9.2.1.53B		_	
>>>>IB SG DATA	C- CRNCOrig ination		9.2.1.32		_	
>>Deletion			NULL			

Range bound	Explanation
maxIB	Maximum number of information Blocks supported in one message
maxIBSEG	Maximum number of segments for one Information Block

Condition	Explanation
CRNCOrigination	The IE shall be present if the SIB Originator IE is set to "CRNC" or if the
	IB Type IE is set to "MIB", "SB1" or "SB2".
SIB	The IE shall be present if the IB Type IE is set to "SIB".

#### 9.1.34 SYSTEM INFORMATION UPDATE RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

## 9.1.35 SYSTEM INFORMATION UPDATE FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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	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	reject
<b>UL DPCH Information</b>		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		_	
702 On Targot			9.2.1.67A			
>Diversity Mode	M		9.2.2.9		-	
>Not Used	0		NULL		-	
>Not Used	0		NULL		_	
>DPC Mode	0		9.2.2.13C		YES	reject
>UL DPDCH Indicator For E-DCH Operation	0		9.2.2.61	This IE may be present without the presence of the E-DPCH Information IE	YES	reject
DL DPCH Information		01			YES	reject
>TFCS	M		9.2.1.58	For DL	_	
>DL DPCH Slot Format	M		9.2.2.10		-	
>TFCI Signalling Mode	M		9.2.2.50		-	
>TFCI Presence	C- SlotFormat		9.2.1.57		_	
>Multiplexing Position	M		9.2.2.23		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		-	
>Power Offset		1			-	
Information						
>>P01	М		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>PO2	М		Power Offset 9.2.2.29	Power offset for the TPC bits	-	
>>PO3	М		Power Offset 9.2.2.29	Power offset for the pilot bits	-	
>FDD TPC DL Step Size	М		9.2.2.16		_	
>Limited Power Increase	М		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
RL Information		1 <maxno< td=""><td></td><td></td><td>EACH</td><td>notify</td></maxno<>			EACH	notify

DI ID						
>RL ID	М	ofRLs>	9.2.1.53		_	
>C-ID	M		9.2.1.9		_	
>First RLS Indicator	M		9.2.2.16A		_	
>Frame Offset	M		9.2.1.31			
>Chip Offset	M		9.2.2.2			
	0		9.2.2.35			
>Propagation Delay	C-		9.2.2.35			
>Diversity Control Field	NotFirstRL					
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		_	
>Initial DL Transmission Power	М		DL Power 9.2.1.21	Initial power on DPCH or on F-DPCH	-	
>Maximum DL Power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	-	
>Minimum DL Power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	-	
>Not Used	0		NULL		-	
>Transmit Diversity	C-Diversity		9.2.2.53		_	
Indicator	mode					
>RL Specific DCH	0		9.2.1.53G		YES	ignore
Information						
>Delayed Activation	0		9.2.1.24C		YES	reject
>Primary CPICH Usage For	0		9.2.2.33A		YES	ignore
Channel Estimation						
>Secondary CPICH Information	0		Common Physical Channel ID 9.2.1.13		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH	0		9.2.2.39a		YES	ignore
Information						
>Synchronisation Indicator	0		9.2.2.48A		YES	ignore
>Extended Propagation Delay	0		9.2.2.35A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.93		YES	reject
> HS-DSCH	0		9.2.2.112		YES	ignore
Preconfiguration Setup			0.2.22		0	.g
Transmission Gap Pattern	0		9.2.2.53A		YES	reject
Sequence Information	-				3	. 5,550
Active Pattern Sequence	0		9.2.2.A		YES	reject
Information			0.0.0.157		\/=0	
DL Power Balancing	0		9.2.2.12B		YES	ignore
Information			110 200::		\/=0	
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

DPDCHs		T = -	1				
SE-TFCS Information	>Maximum Set of E- DPDCHs	M		9.2.2.20C		_	
SE-TTI	>Puncture Limit	M		9.2.1.50		_	
SE-TIT	>E-TFCS Information	M		9.2.2.13Dh		_	
>E-DPCCH Power Offset         M         9.2.2.13Dj         -           SE-RGCH 2-Index-Step         M         9.2.2.13lg         -           Threshold         -         -           >E-RGCH 3-Index-Step         M         9.2.2.18ba         -           Threshold         -         -           SHS-DSCH Configured         M         9.2.2.18ba         -           Indicator         -         -           SE-RNTI         O         9.2.1.75         YES         reject           SMinimum Reduced E-DPCHInf on EDPCH Gain Factor         9.2.2.114         YES         reject           E-DCH FDD Information         C-EDPCHInf on Power of Information         9.2.2.18b         YES         reject           Serving E-DCH RL         O         9.2.2.48B         YES         reject           Information         01         YES         reject           >>POVER Offset Information         01         YES         reject           >FDD TPC DL Step Size         M         9.2.2.18B         -         -           >FDD TPC DL Step Size         M         9.2.2.18B         -         -           >Inflated Power Increase         M         9.2.2.18B         -         -		М		9.2.2.13Di		_	
SE-RGCH 2-Index-Step   M		М		9.2.2.13Dj		_	
Threshold   SE-RGCH 3-Index-Step   M		М				_	
SE-RGCH 3-Index-Step   M	•						
Threshold		М		9.2.2.13lh		_	
SHARQ Info for E-DCH	· ·						
SHS-DSCH Configured Indicator		М		9.2.2.18ba		_	
Indicator   SE-RNTI							
SE-RNTI	<u> </u>	***		0.2.2.1004			
Minimum Reduced E-DPDCH Gain Factor		0		9 2 1 75		YES	reject
DPDCH Gain Factor         C- E-DCH FDD Information         C- EDPCHInf o         9.2.2.13Da         YES         reject           Serving E-DCH RL >-POWER Offset Information         0         9.2.2.48B         YES         reject           >POWER Offset Information         1         -         -         -           >>PO2         M         Power Offset 9.2.2.29         This IE shall be ignored by Node B.         -           >FDD TPC DL Step Size >-Inner Loop DL PC Status >-Inner Loop DL PC Status M         M         9.2.2.18A         -           >-Initial DL DPCH Timing Adjustment Allowed         0         9.2.2.18K         YES         reject           DCH Indicator For E-DCH- HSDPA Operation         0         9.2.2.4F         YES         reject           Serving Cell Change CFN         0         CFN 9.2.1.7         YES         reject           Continuous Packet Connectivity DTX-DRX Information         0         9.2.2.66         YES         reject           Additional HS Cell Information RL Setup         0         9.2.2.68         For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.         -           >H-1>         M         9.2.1.53 9.2.1.53         -         -           >HS-PDSCH FLDD         M         9.2.1.90         -         -           >CID </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
E-DCH FDD Information				3.2.2.114		120	ignore
Serving E-DCH RL		C		0.2.2.12Da		VEQ	roject
Serving E-DCH RL	E-DCH FDD Information	EDPCHInf		9.2.2.13Da		TES	reject
F-DPCH Information         01         YES         reject           >Power Offset Information         1         -         -           >POVED Information         M         Power Offset Information         This IE shall be ignored by Node B.         -           >PDD TPC DL Step Size         M         9.2.2.16         -           >Limited Power Increase         M         9.2.2.18A         -           >Initial DL DPCH Timing         O         9.2.2.18B         -           Initial DL DPCH Timing         O         9.2.2.18K         YES         ignore           Adjustment Allowed         O         9.2.2.4F         YES         reject           DCH Indicator For E-DCH-HSDPA Operation         O         9.2.2.4F         YES         reject           Serving Cell Change CFN         O         CFN 9.2.1.7         YES         reject           Continuous Packet Connectivity DTX-DRX Information         O         9.2.2.66         YES         reject           Connectivity HS-SCCH less Information         O         9.2.2.68         YES         reject           Additional HS Cell Information RL Setup         O         RL ID         Por secondary serving HS-DSCH ID         EACH serving HS-DSCH ID         Por secondary serving HS-DSCH ID         Por secondary Serving HS-D	Serving F-DCH RI			9.2.2.48B		YES	reject
Note			01			YES	-
Information							
SFDD TPC DL Step Size							
SFDD 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         O         9.2.2.18K         YES         ignore           Adjustment Allowed         DCH Indicator For E-DCH-HSDPA Operation         O         9.2.2.4F         YES         reject           Continuous Packet         O         9.2.1.7         YES         reject           Connectivity DTX-DRX Information         O         9.2.2.66         YES         reject           Connectivity HS-SCCH less Information RL Setup         O <maxno h-1="" hsdsc="" of="">         For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.         EACH reject         reject           &gt;HS-PDSCH RL ID         M         RL ID 9.2.1.53         —         —           &gt;C-ID         M         9.2.1.9         —         —           &gt;HS-DSCH FDD Secondary         M         9.2.2.18Da         —         —</maxno>	>>PO2	М		Offset	ignored by	_	
S-Limited Power Increase	>FDD TPC DL Step Size	M			Node D.		
Sinner Loop DL PC Status   M						_	
Initial DL DPCH Timing   Adjustment Allowed   9.2.2.18K   YES   ignore						_	
Adjustment Allowed         O         9.2.2.4F         YES         reject           DCH Indicator For E-DCH-HSDPA Operation         O         9.2.2.4F         YES         reject           Serving Cell Change CFN         O         CFN 9.2.1.7         YES         reject           Continuous Packet Connectivity DTX-DRX Information         O         9.2.2.66         YES         reject           Continuous Packet Connectivity HS-SCCH less Information         O         9.2.2.68         YES         reject           Additional HS Cell Information RL Setup         O <maxno h-1="" ofhsdsc="">         For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.         Serving HS-DSCH cell. Max 1 in this 3GPP release.         -           &gt;HS-PDSCH RL ID         M         RL ID 9.2.1.53         -         -           &gt;C-ID         M         9.2.1.9         -         -           &gt;HS-DSCH FDD Secondary         M         9.2.2.18Da         -</maxno>		0		9.2.2.18K		YES	ignore
DCH Indicator For E-DCH-	Adjustment Allowed						
Serving Cell Change CFN		0		9.2.2.4F		YES	reject
Serving Cell Change CFN	HSDPA Operation						
9.2.1.7   9.2.1.7     9.2.1.7	Serving Cell Change CFN	0				YES	reject
Connectivity DTX-DRX	3 1 1 3 3 1						-
Information	Continuous Packet	0		9.2.2.66		YES	reject
Continuous Packet         O         9.2.2.68         YES         reject           Connectivity HS-SCCH less Information         0         For secondary serving HS-DSC H-1>         EACH         reject           Information RL Setup         0         For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.         DSCH cell. Max 1 in this 3GPP release.         —           >HS-PDSCH RL ID         M         RL ID 9.2.1.53         —         —           >C-ID         M         9.2.1.9         —           >HS-DSCH FDD Secondary         M         9.2.2.18Da         —	Connectivity DTX-DRX						
Connectivity HS-SCCH less   Information	Information						
Information	Continuous Packet	0		9.2.2.68		YES	reject
Additional HS Cell Information RL Setup         0 <maxno h-1="" ofhsdsc="">         For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.         EACH         reject           &gt;HS-PDSCH RL ID         M         RL ID 9.2.1.53         -         -           &gt;C-ID         M         9.2.1.9         -         -           &gt;HS-DSCH FDD Secondary         M         9.2.2.18Da         -         -</maxno>	Connectivity HS-SCCH less						
Information RL Setup         ofHSDSC H-1>         serving HS- DSCH cell. Max 1 in this 3GPP release.           >HS-PDSCH RL ID         M         RL ID 9.2.1.53         —           >C-ID         M         9.2.1.9         —           >HS-DSCH FDD Secondary         M         9.2.2.18Da         —	Information						
H-1>   DSCH cell. Max   1 in this 3GPP   release.	Additional HS Cell		0 <maxno< td=""><td></td><td>For secondary</td><td>EACH</td><td>reject</td></maxno<>		For secondary	EACH	reject
>HS-PDSCH RL ID         M         RL ID 9.2.1.53         -           >C-ID         M         9.2.1.9         -           >HS-DSCH FDD Secondary         M         9.2.2.18Da         -	Information RL Setup		ofHSDSC		serving HS-		
HS-PDSCH RL ID         M         RL ID 9.2.1.53         —           >C-ID         M         9.2.1.9         —           >HS-DSCH FDD Secondary         M         9.2.2.18Da         —			H-1>		DSCH cell. Max		
>HS-PDSCH RL ID       M       RL ID       -         9.2.1.53       9.2.1.53       -         >C-ID       M       9.2.1.9       -         >HS-DSCH FDD Secondary       M       9.2.2.18Da       -					1 in this 3GPP		
9.2.1.53  >C-ID					release.		
>C-ID         M         9.2.1.9         -           >HS-DSCH FDD Secondary         M         9.2.2.18Da         -	>HS-PDSCH RL ID	M		9.2.1.53		_	
>HS-DSCH FDD Secondary M 9.2.2.18Da -	>C-ID	М				_	
		М		9.2.2.18Da		_	
	Serving Information						

Condition	Explanation
CodeLen	The IE shall be present if Min UL Channelisation Code Length IE equals
	to 4.
NotFirstRL	The IE shall be present if the RL is not the first one in the RL Information
	IE.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to any of
	the values from 12 to 16.
Diversity mode	The IE shall be present if Diversity Mode IE in UL DPCH Information IE
	is not set to "none".
InfoHSDSCH	The IE shall be present if HS-DSCH Information IE is present.
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		-	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	reject
UL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		-	
>Puncture Limit	M		9.2.1.50		-	
>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information	М		9.2.3.26C		_	
>UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>UL Timeslot Information LCR	М		9.2.3.26E		_	
>UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>TDD TPC UL Step Size	0		9.2.3.21a	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>UL DPCH Information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information 7.68Mcps	М		9.2.3.38		_	
DL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3		-	
>TFCS	M		9.2.1.58		-	
>TFCI Coding	M		9.2.3.22		_	
>Puncture Limit	M		9.2.1.50		-	
>TDD TPC DL Step Size	M		9.2.3.21		_	
>TPC CCTrCH List		0 <maxno< td=""><td></td><td>List of uplink</td><td>-</td><td></td></maxno<>		List of uplink	-	

	1	CCTrCH>		CCTrCH which		
		COTTOTI		provide TPC		
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.3		_	
>DL DPCH information		01	0.2.0.0	Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		ı	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot	M		9.2.3.4E		_	
Information						
>DL DPCH information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16	Offiny	_	
>>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	М		9.2.1.64		_	
>CCTrCH Initial DL	0		DL Power		YES	ignore
Transmission Power			9.2.1.21			_
>CCTrCH Maximum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>CCTrCH Minimum DL Transmission Power	0		DL Power 9.2.1.21		YES	ignore
>DL DPCH information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>DL Timeslot Information 7.68Mcps	М		9.2.3.39		_	
DCH Information	0		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	0		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	0		9.2.3.28		YES	reject
RL Information		1			YES	reject
>RL ID	M		9.2.1.53		_	
>C-ID	M		9.2.1.9		_	
>Frame Offset	M		9.2.1.31		_	
>Special Burst Scheduling	M		9.2.3.18A		-	
>Initial DL Transmission Power	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 and 7.68Mcps TDD only	-	
>DL Time Slot ISCP Info LCR	0		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore

>Delayed Activation	0		9.2.1.24C		YES	reject
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Uplink Synchronisation Step Size	M		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		-	
>UARFCN	0		9.2.1.65	Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]	YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	C- InfoHSDS CH		9.2.1.31J		YES	reject
HS-PDSCH RL ID	C- InfoHSDS CH		RL ID 9.2.1.53		YES	reject
PDSCH-RL-ID	0		RL ID 9.2.1.53		YES	ignore
E-DCH Information		01		3.84Mcps TDD only	YES	reject
>E-PUCH Information	M		9.2.3.45		-	
>E-TFCS Information TDD	M		9.2.3.46			
>E-DCH MAC-d Flows Information TDD	M		9.2.3.47		_	
>E-DCH Non-scheduled Grant Information TDD	0		9.2.3.48		_	
>E-DCH TDD Information	М		9.2.3.49		_	
E-DCH Serving RL	0		9.2.1.53		YES	reject
E-DCH Information		01		7.68Mcps TDD	YES	reject
7.68Mcps				only		
>E-PUCH Information	M		9.2.3.45			
>E-TFCS Information TDD >E-DCH MAC-d Flows	M		9.2.3.46 9.2.3.47			
Information TDD					_	
>E-DCH Non-scheduled Grant Information 7.68Mcps TDD	0		9.2.3.64		_	
>E-DCH TDD Information 7.68Mcps	M		9.2.3.65		_	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only	YES	reject
>E-PUCH Information LCR	М		9.2.3.45a		-	
>E-TFCS Information TDD	M		9.2.3.46		_	
>E-DCH MAC-d Flows Information TDD	M		9.2.3.47		_	
>E-DCH Non-scheduled Grant Information LCR TDD	0		9.2.3.48a		-	
>E-DCH TDD Information LCR	М		9.2.3.49a		-	
Power Control GAP	0		INTEGER (1255)	Unit: Number of subframes Applicable to 1.28Mcps TDD only	YES	ignore

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 Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>RL Set ID	М		9.2.2.39		_	
>Received Total Wide Band Power	М		9.2.2.39A		_	
>CHOICE Diversity Indication	М				_	
>>Combining						
>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	-	
>>Non Combining or First RL				-		
>>>DCH Information Response	М		9.2.1.20C		_	
>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>Not Used	0		NULL		_	
>SSDT Support Indicator	M		9.2.2.46		_	
>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
> HS-DSCH Preconfiguration Info	0		9.2.2.111		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
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69		YES	ignore

Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	M		RL ID 9.2.1.53		-	
>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.18EA		ı	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.37.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
RL Information Response		01		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info	М		9.2.3.26D		_	
>UL PhysCH SF Variation	М		9.2.3.26B		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.3.5b		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info LCR	M		9.2.3.26F		_	
>UL PhysCH SF Variation	М		9.2.3.26B		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.3.5b		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.5G		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.50		YES	ignore

### 9.1.38 RADIO LINK SETUP FAILURE

### 9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All NBCC' shall not be used	YES	ignore
Communication Control Port ID	0		9.2.1.15		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	M		9.2.1.6		_	
>RL Specific						
>>Unsuccessful RL Information Response		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	M		9.2.1.6		_	
>>Successful RL Information Response		0 <maxno ofRLs&gt;</maxno 		Note: There will never be maxnoofRLs repetitions of this sequence.	EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>RL Set ID	M		9.2.2.39		_	
>>>Received Total Wide Band Power	М		9.2.2.39A		_	
>>>CHOICE Diversity Indication	М				_	
>>>Combining						
>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	_	
>>>Non Combining or First RL						
>>>>DCH Information Response	M		9.2.1.20C		_	
>>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>>>Not Used	0		NULL		-	
>>>Not Used	0		NULL		_	
>>>SSDT Support Indicator	M		9.2.2.46		_	
>>>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>>>E-DCH FDD DL	0		9.2.2.13Dc		YES	ignore

Control Channel Information						
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
>>> HS-DSCH Preconfiguration Info	0		9.2.2.111		YES	ignore
>>HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
>>Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69		YES	ignore
>>Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>>>HS-PDSCH RL ID	М		RL ID 9.2.1.53		-	
>>>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.18EA		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been
	successfully set up.

Range Bound	Explanation				
maxnoofRLs	Maximum number of RLs for one UE				
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE				

# 9.1.38.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	M		9.2.1.6		_	
>RL Specific						
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

### 9.1.39 RADIO LINK ADDITION REQUEST

### 9.1.39.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		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
Compressed Mode Deactivation Flag	0		9.2.2.3A		YES	reject
RL Information		1 <maxno ofRLs-1&gt;</maxno 			EACH	notify
>RL ID	M		9.2.1.53		1	
>C-ID	M		9.2.1.9		_	
>Frame Offset	M		9.2.1.31		_	
>Chip Offset	M		9.2.2.2		_	
>Diversity Control Field	М		9.2.1.25		_	
>DL Code Information	М		FDD DL Code Information 9.2.2.14A		I	
>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	1	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	-	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	0		9.2.2.53		_	
>DL Reference Power	0		DL power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH Information	0		9.2.2.39a		YES	ignore
>Synchronisation Indicator	0		9.2.2.48A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.93		YES	reject
>HS-DSCH	0		9.2.2.112		YES	ignore
Preconfiguration Setup Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.18K		YES	ignore
Serving E-DCH RL	0		9.2.2.48B		YES	reject
Serving Cell Change CFN	0		CFN 9.2.1.7		YES	reject
HS-DSCH Serving Cell Change Information	0		9.2.2.18Eb		YES	reject
E-DPCH Information		01			YES	reject

>Maximum Set of E- DPDCHs	М		9.2.2.20C		_	
>Puncture Limit	М		9.2.1.50		-	
>E-TFCS Information	М		9.2.2.13Dh		-	
>E-TTI	М		9.2.2.13Di		ı	
>E-DPCCH Power Offset	М		9.2.2.13Dj		-	
>E-RGCH 2-Index-Step	М		9.2.2.13lg		_	
Threshold	M		9.2.2.13lh			
>E-RGCH 3-Index-Step Threshold	IVI		9.2.2.13111		_	
>HARQ Info for E-DCH	М		9.2.2.18ba		_	
>HS-DSCH Configured	М		9.2.2.18Ca		YES	reject
Indicator						
> Minimum Reduced E-	0		9.2.2.114		YES	ignore
DPDCH Gain Factor						
E-DCH FDD Information	C- EDPCHInf o		9.2.2.13Da		YES	reject
Additional HS Cell Information RL Addition		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>C-ID	М		9.2.1.9		_	
>HS-DSCH FDD Secondary Serving Information	М		9.2.2.18Da		-	

Condition	Explanation			
EDPCHInfo	This IE shall be present if E-DPCH Information IE is present.			

Range Bound	Explanation				
maxnoofRLs	Maximum number of RLs for one UE				
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE				

# 9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot	М		9.2.3.26C			
Information >UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16	0,	_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>UL Timeslot Information LCR	М		9.2.3.26E		_	
>TDD TPC UL Step Size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	reject
>UL DPCH Information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information 7.68Mcps	М		9.2.3.38		_	
DL CCTrCH Information		0 <maxno CCTrCH&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>DL DPCH information		01		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot	М		9.2.3.4E		_	
Information >DL DPCH information LCR		01		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	М		9.2.3.16	,	_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>DL Timeslot Information LCR	М		9.2.3.40		_	
>CCTrCH Initial DL	0		DL Power		YES	ignore

Transmission Power			9.2.1.21	<u> </u>		
	0	1	9.2.3.21		YES	reject
>TDD TPC DL Step Size >CCTrCH Maximum DL	0		DL Power 9.2.1.21		YES	ignore
Transmission Power >CCTrCH Minimum DL	0		DL Power		YES	ignore
Transmission Power		01	9.2.1.21	Applicable to	YES	notify
>DL DPCH information 7.68Mcps		01		7.68Mcps TDD only	150	noully
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>DL Timeslot	М		9.2.3.39		_	
Information 7.68Mcps						
RL Information		1			YES	reject
>RL ID	М		9.2.1.53		_	
>C-ID	М		9.2.1.9		_	
>Frame Offset	М		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		_	
	0		9.2.1.21 DL Power			
>Minimum DL Power			9.2.1.21	<u>                                     </u>		
>DL Time Slot ISCP Info	0		9.2.3.4F	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only	-	
>DL Time Slot ISCP Info LCR	0		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>Delayed Activation	0		9.2.1.24C		YES	reject
>UL Synchronisation		01		Mandatory for	YES	reject
Parameters LCR				1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.		
>>Uplink Synchronisation Step Size	М		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	М		9.2.3.26G		-	
>UARFCN	0		9.2.1.65	Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]	YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject
E-DCH Information		01		3.84Mcps TDD only	YES	reject
>E-PUCH Information	М		9.2.3.45		_	

	1	1	T			
>E-TFCS Information TDD	M		9.2.3.46		_	
>E-DCH MAC-d Flows	M		9.2.3.47		_	
Information TDD						
>E-DCH Non-scheduled	0		9.2.3.48		-	
Grant Information TDD						
>E-DCH TDD Information	M		9.2.3.49		-	
E-DCH Serving RL	0		9.2.1.53		YES	reject
E-DCH Information		01		7.68Mcps TDD	YES	reject
7.68Mcps				only		-
>E-PUCH Information	M		9.2.3.45		_	
>E-TFCS Information TDD	М		9.2.3.46		_	
>E-DCH MAC-d Flows	M		9.2.3.47		_	
Information TDD						
>E-DCH Non-scheduled	0		9.2.3.64		_	
Grant Information 7.68Mcps						
TDD						
>E-DCH TDD Information	М		9.2.3.65		_	
7.68Mcps						
E-DCH Information		01		1.28Mcps TDD	YES	reject
1.28Mcps				only		Ţ
>E-PUCH Information LCR	M		9.2.3.45a	•	_	
>E-TFCS Information TDD	М		9.2.3.46		_	
>E-DCH MAC-d Flows	М		9.2.3.47		_	
Information TDD						
>E-DCH Non-scheduled	0		9.2.3.48a		_	
Grant Information LCR TDD						
>E-DCH TDD Information	М		9.2.3.49a		_	
LCR						
Power Control GAP	0		INTEGER	Unit: Number of	YES	ignore
			(1255)	subframes		•
			, ,	Applicable to		
				1.28Mcps TDD		
				only		
		1	1			

Range Bound	Explanation
maxnoCCTrCH	Number of CCTrCH for one UE

Condition	Explanation
HSDSCHRadioLink	The IE shall be present if HS-PDSCH RL ID IE is present

### 9.1.40 RADIO LINK ADDITION RESPONSE

### 9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	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		1 <maxno ofRLs-1&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>RL Set ID	М		9.2.2.39		_	
>Received Total Wide Band Power	М		9.2.2.39A		_	
>CHOICE Diversity Indication	M				_	
>>Combining						
>>>RL ID	М		9.2.1.53	Reference RL	-	
>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>>Non Combining	M		9.2.1.20C			
>>>DCH Information Response					_	
>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>SSDT Support Indicator	М		9.2.2.46		_	
>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
> HS-DSCH Preconfiguration Info	0		9.2.2.111		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
HS-DSCH Serving Cell Change Information Response	0		9.2.2.18Ec		YES	ignore
E-DCH Serving Cell Change Information Response	0		9.2.2.18Ed		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.38Ac		YES	ignore
Additional HS Cell Change Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		-	
>HS-DSCH Secondary Serving Cell Change	М		9.2.2.18Eca		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
RL Information Response		01		Mandatory for 3.84Mcps TDD and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info	M		9.2.3.26D		_	
>UL PhysCH SF Variation	M		9.2.3.26B		_	
>DCH Information		01			_	
>>CHOICE Diversity Indication	М				_	
>>>Combining				Indicates whether the old Transport Bearer shall be reused or not		
>>>>RL ID	M		9.2.1.53	Reference RL	-	
>>>Non Combining						
>>>>DCH Information Response	М		9.2.1.20C		_	
>DSCH Information Response	0		9.2.3.5b		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.53	·	_	
>UL Time Slot ISCP Info LCR	М		9.2.3.26F		_	
>UL PhysCH SF Variation	M		9.2.3.26B		_	
>DCH Information		01			_	
>>CHOICE Diversity indication	М				-	
>>>Combining				Indicates whether the old Transport Bearer shall be reused or not		
>>>RL ID	М		9.2.1.53	Reference RL	_	
>>>Non Combining						
>>>>DCH Information Response	М		9.2.1.20C		_	
>DSCH Information Response	0		9.2.3.5b		YES	ignore

>USCH Information	0	9.2.3.29	YES	ignore
Response				
HS-DSCH Information	0	HS-DSCH	YES	ignore
Response		TDD		
		Information		
		Response		
		9.2.3.5G		
E-DCH Information Response	0	E-DCH	YES	ignore
·		TDD		-
		Information		
		Response		
		9.2.3.50		

### 9.1.41 RADIO LINK ADDITION FAILURE

### 9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
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	М		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>				J
>>>RL ID	М		9.2.1.53		_	
>>>RL ID	M		9.2.2.39		_	
>>>Received Total	M		9.2.2.39A		_	
	IVI		3.2.2.33A			
Wide Band Power	M				_	
>>>CHOICE Diversity	IVI				_	
Indication						
>>>Combining	8.4		0.04.50	Deference DI		
>>>> RL ID	M		9.2.1.53	Reference RL	-	
>>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>>>Non Combining						
>>>>DCH Information Response	М		9.2.1.20C		-	
>>>>E-DCH FDD Information Response	0		9.2.2.13Db		YES	ignore
>>>SSDT Support Indicator	М		9.2.2.46		_	
>>>DL Power Balancing Activation Indicator	0		9.2.2.12C		YES	ignore
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.39		YES	ignore
>>>E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc		YES	ignore
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.10A		YES	ignore
>>> HS-DSCH Preconfiguration Info	0		9.2.2.111		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
HS-DSCH Serving Cell	0		9.2.2.18Ec		YES	ignore

Change Information Response						
E-DCH Serving Cell Change Information Response	0		9.2.2.18Ed		YES	ignore
Additional HS Cell Change Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>HS-DSCH Secondary Serving Cell Change Information Response	M		9.2.2.18Eca		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

### 9.1.41.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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	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	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

#### FDD Message 9.1.42.1

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
<b>UL DPCH Information</b>		01			YES	reject
>UL Scrambling Code	0		9.2.2.59		_	
>UL SIR Target	0		UL SIR 9.2.1.67A		_	
>Min UL Channelistion Code Length	0		9.2.2.22		-	
>Max Number of UL DPDCHs	C- CodeLen		9.2.2.21		_	
>Puncture Limit	0		9.2.1.50	For UL	_	
>TFCS	0		9.2.1.58		_	
>UL DPCCH Slot Format	0		9.2.2.57		_	
>Diversity Mode	0		9.2.2.9		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>UL DPDCH Indicator For	0		9.2.2.61		YES	reject
E-DCH Operation						
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58		_	-
>DL DPCH Slot Format	0		9.2.2.10		_	
>TFCI Signalling Mode	0		9.2.2.50		_	
>TFCI Presence	C- SlotFormat		9.2.1.57		-	
>Multiplexing Position	0		9.2.2.23		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>Limited Power Increase	0		9.2.2.18A		_	
>DL DPCH Power Information		01			YES	reject
>>Power Offset Information		1			_	
>>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	ı	
>>>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	M		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		YES	reject

			9.2.2.4D			
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 	-		GLOBAL	reject
>DCH ID	M		9.2.1.20		_	
RL Information		0 <maxno ofRLs&gt;</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	_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		_	
>DL Reference Power	0		DL Power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>DL DPCH Timing Adjustment	0		9.2.2.10A	Required RL Timing Adjustment	YES	reject
>Primary CPICH Usage For Channel Estimation	0		9.2.2.33A		YES	ignore
>Secondary CPICH Information Change	0		9.2.2.43A		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH Information	0		9.2.2.39a		YES	ignore
>F-DPCH Slot Format	0		9.2.2.93		YES	reject
Transmission Gap Pattern Sequence Information	0		9.2.2.53A		YES	reject
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH Information To Modify	0		9.2.1.31H		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 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

	Г _	1	T	1		
>Maximum Set of E- DPDCHs	0		9.2.2.20C		-	
>Puncture Limit	0		9.2.1.50		_	
>E-TFCS Information	0		9.2.2.13Dh		_	
>E-TTI	0		9.2.2.13Di		ı	
>E-DPCCH Power Offset	0		9.2.2.13Dj		_	
>E-RGCH 2-Index-Step	0		9.2.2.13lg		_	
Threshold						
>E-RGCH 3-Index-Step	0		9.2.2.13lh		_	
Threshold						
	0		9.2.2.18ba		_	
>HARQ Info for E-DCH	0		9.2.2.18Ca			
>HS-DSCH Configured			9.2.2.10Ca		_	
Indicator						
> Minimum Reduced E-	0		9.2.2.114		YES	ignore
DPDCH Gain Factor						
E-DCH FDD Information	0		E-DCH		YES	reject
			FDD			-
			Information			
			9.2.2.13Da			
E-DCH FDD Information To	0		9.2.2.13Df		YES	reject
Modify		1				
E-DCH MAC-d Flows To Add	0		E-DCH		YES	reject
			MAC-d			,
			Flows			
			Information			
			9.2.2.13M			
E-DCH MAC-d Flows To	0		9.2.1.73		YES	reject
Delete						
Serving E-DCH RL	0		9.2.2.48B		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset		1				. 0,001
		,				
Information			D	This IT shall be		
>>PO2	М		Power	This IE shall be	_	
			Offset 9.2.2.29	ignored by Node B.		
EDD TDO DI Otara Giar	M		9.2.2.16	Node D.		
>FDD TPC DL Step Size					_	
>Limited Power Increase	M		9.2.2.18A		_	
>Inner Loop DL PC Status	M		9.2.2.18B		-	
Fast Reconfiguration Mode	0		9.2.2.62		YES	ignore
CPC Information		01			YES	reject
>Continuous Packet	0		9.2.2.66		_	
Connectivity DTX-DRX	~	1	0.2.2.00		_	
Information						
		+	0.0.0.7			
>Continuous Packet	0		9.2.2.67		_	
Connectivity DTX-DRX		1				
Information To Modify		1	1			
>Continuous Packet	0		9.2.2.68		_	
Connectivity HS-SCCH		1				
less Information		1				
>Continuous Packet	0		9.2.2.69A		YES	reject
Connectivity HS-SCCH	-	1	= =:53			-
less Deactivate Indicator		1				
Additional HS Cell		0 <maxno< td=""><td></td><td>For occondent</td><td>EACH</td><td>reject</td></maxno<>		For occondent	EACH	reject
				For secondary	2,011	10,000
Information RL Reconf Prep		ofHSDSC		serving HS-		
		H-1>		DSCH cell. Max		
			1	1 in this 3GPP		
				release.		
>HS-PDSCH RL ID	M		RL ID		_	
>HS-PDSCH RL ID >C-ID	M		RL ID 9.2.1.53 9.2.1.9		-	

>HS-DSCH FDD	0	9.2.2.18Da	_	
Secondary Serving				
Information				
>HS-DSCH FDD	0	9.2.2.18Eb	_	
Secondary Serving				
Information To Modify				
>HS-DSCH Secondary	0	NULL	_	
Serving Remove				

Condition	Explanation
CodeLen	The IE shall be present if the Min UL Channelisation Code Length IE is
	equals to 4.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to any of
	the values from 12 to 16.
Diversity mode	The IE shall be present if the <i>Diversity Mode</i> IE is present in the <i>UL</i>
•	DPCH Information IEand is not set to "none".
HSDSCH Radio Link	The IE shall be present if HS-PDSCH RL ID IE is present.

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofRLs	Maximum number of RLs for a UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	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		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH To Add		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	M		9.2.3.22		_	
>Puncture Limit	М		9.2.1.50		_	
>UL DPCH To Add Per RL		0 <maxno ofRLs&gt;</maxno 		See note 1 below	_	
>>UL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16			
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>UL Timeslot	М		9.2.3.26C		_	
Information						
>>UL DPCH Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16	Office	_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>UL Timeslot	М		9.2.3.26E		_	
Information LCR						
>>UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD	YES	reject
>>TDD TPC UL Step Size	0		9.2.3.21a	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>RL ID	0		9.2.1.53		YES	ignore
>>UL DPCH Information 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	reject
>>>Repetition Period	M		9.2.3.16	<u>-</u>	_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	M	1	9.2.3.38		_	
Information 7.68Mcps						
UL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М	-	9.2.3.3		_	
	ı	1	I.	I.	<u> </u>	l

TEOO	0	1	9.2.1.58		_	
>TFCS	0		9.2.1.30		_	
>TFCI Coding	0		9.2.3.22		_	
>Puncture Limit	U	0 (mayna	9.2.1.50	See note 1	_	
>UL DPCH To Modify Per		0 <maxno ofRLs&gt;</maxno 		below	_	
>>UL DPCH To Add		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	M		9.2.3.16	•	_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	M		9.2.3.26C		_	
Information						
>>UL DPCH To Modify		01			YES	reject
>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition Length	0		9.2.3.15		_	
>>>TDD DPCH Offset	0		9.2.3.19A		_	
>>>UL Timeslot Information		0 <maxno ofULts&gt;</maxno 		Applicable to 3.84Mcps TDD only	_	
>>>>Time Slot	М		9.2.3.23	J,	_	
>>>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	М		9.2.3.5		_	
>>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>>>UL Timeslot		0 <maxno< td=""><td></td><td>Applicable to</td><td>GLOBAL</td><td>reject</td></maxno<>		Applicable to	GLOBAL	reject
Information LCR		ofULtsLCR >		1.28Mcps TDD only		-
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>>Midamble Shift LCR	0		9.2.3.7A			
>>>TFCI Presence	0		9.2.1.57		_	
>>>UL Code Information LCR		0 <maxno ofDPCHsL CR&gt;</maxno 			-	
>>>>DPCH ID	М		9.2.3.5		_	
>>>>TDD Channelisation Code LCR	0		9.2.3.19a		-	
>>>>TDD UL DPCH Time Slot Format LCR	0		9.2.3.21C		YES	reject
>>>PLCCH Information	0		9.2.3.31		YES	reject
>>>UL Timeslot Information 7.68Mcps		0 <maxno ofULts&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>>>Time Slot	М		9.2.3.23			
>>>>Midamble Shift	0		9.2.3.35		_	
And Burst Type 7.68Mcps						
>>>TFCI Presence	0		9.2.1.57		_	
>>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information	1	ofDPCHs>				
7.68Mcps	1	1				
>>>>DPCH ID	M		9.2.3.5		_	

		1	00004		1	
>>>>TDD	0		9.2.3.34		_	
Channelisation Code						
7.68Mcps		0 100100			GLOBAL	raiaat
>>UL DPCH To Delete		0 <maxno ofDPCHs&gt;</maxno 			GLOBAL	reject
>>>DPCH ID	М		9.2.3.5		_	
>>UL DPCH To Add LCR		01		Applicable to	YES	reject
				1.28Mcps TDD only		-
>>>Repetition Period	M		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	M		9.2.3.19A		_	
>>>UL Timeslot	M		9.2.3.26E		_	
Information LCR						
>>UL SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
>>TDD TPC UL Step Size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	reject
>>RL ID	0		9.2.1.53	-	YES	ignore
>>UL DPCH To Add 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>UL Timeslot	М		9.2.3.38		_	
Information 7.68Mcps						
UL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
DL CCTrCH To Add		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	М		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		_	
>Puncture Limit	M		9.2.1.50		_	
>TPC CCTrCH List		0 <maxno ofCCTrCH s&gt;</maxno 		List of uplink CCTrCH which provide TPC	_	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.3	, pre-11-2	_	
>DL DPCH To Add Per RL		0 <maxno ofRLs&gt;</maxno 		See Note 1 below	_	
>>DL DPCH Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	М		9.2.3.4E		_	
Information						
>>DL DPCH Information		01		Applicable to	YES	reject
LCR				1.28Mcps TDD only		
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	M		9.2.3.40			

Information LCR				
>>CCTrCH Initial DL	0	DL Power	YES	ignore
Transmission Power		9.2.1.21		
>>TDD TPC DL Step Size	0	9.2.3.21	YES	reject

>>CCTrCH Maximum DL	0		DL Power		YES	ignore
Transmission Power >>CCTrCH Minimum DL	0		9.2.1.21 DL Power		YES	ignore
Transmission Power	O		9.2.1.21		TES	ignore
>>RL ID	0		9.2.1.53		YES	ignore
>>DL DPCH Information		01		Applicable to	YES	reject
7.68Mcps				7.68Mcps TDD only		-
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	M		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	M		9.2.3.39		_	
Information 7.68Mcps						
DL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>TFCI Coding	0		9.2.3.22		_	
>Puncture Limit	0		9.2.1.50		_	
>TPC CCTrCH List		0 <maxno ofCCTrCH s&gt;</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&gt;</maxno 		See Note 1 below	_	
>>DL DPCH To Add		01		Applicable to 3.84Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot	M		9.2.3.4E		_	
Information						
>>DL DPCH To Modify		01			YES	reject
>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition Length	0		9.2.3.15		_	
>>>TDD DPCH Offset	0		9.2.3.19A		_	
>>>DL Timeslot		0 <maxno< td=""><td></td><td>Applicable to</td><td>_</td><td></td></maxno<>		Applicable to	_	
Information		ofDLts>		3.84Mcps TDD only		
>>>>Time Slot	M		9.2.3.23		-	
>>>>Midamble Shift And Burst Type	0		9.2.3.7		_	
>>>TFCI Presence	0		9.2.1.57		-	
>>>DL Code Information		0 <maxno ofDPCHs&gt;</maxno 			_	
>>>>DPCH ID	M		9.2.3.5		_	
>>>>TDD	0		9.2.3.19		_	
Channelisation Code						
>>>DL Timeslot		0 <maxno< td=""><td></td><td>Applicable to</td><td>GLOBAL</td><td>reject</td></maxno<>		Applicable to	GLOBAL	reject
Information LCR		ofDLtsLCR >		1.28Mcps TDD only		
>>>>Time Slot LCR	M		9.2.3.24A		_	
>>>>Midamble Shift LCR	0		9.2.3.7A			
>>>TFCI Presence	0		9.2.1.57		_	
>>>DL Code Information LCR		0 <maxno ofDPCHsL</maxno 			-	
		CR>				

>>>>DPCH ID	М		9.2.3.5		_	
>>>>TDD	0		9.2.3.19a		_	
Channelisation Code LCR						
>>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.19D		YES	reject
>>>Maximum DL Power to Modify LCR	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	YES	ignore
>>>>Minimum DL Power to Modify LCR	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	YES	ignore
>>>DL Timeslot Information 7.68Mcps		0 <maxno ofDLts&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.35		_	
>>>TFCI Presence	0		9.2.1.57		_	
>>>>DL Code Information 7.68Mcps		0 <maxno ofDPCHs7 68&gt;</maxno 			_	
>>>>DPCH ID 7.68Mcps	М		9.2.3.42		_	
>>>>TDD Channelisation Code 7.68Mcps	0		9.2.3.34		_	
>>DL DPCH To Delete		0 <maxno ofDPCHs&gt;</maxno 			GLOBAL	reject
>>>DPCH ID	М		9.2.3.5		_	
>>DL DPCH To Add LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot Information LCR	M		9.2.3.40		_	
>>TDD TPC DL Step Size	0		9.2.3.21		YES	reject
>>Maximum CCTrCH DL Power to Modify	0		DL Power 9.2.1.21		YES	ignore
>>Minimum CCTrCH DL Power to Modify >>RL ID	0		DL Power 9.2.1.21 9.2.1.53		YES YES	ignore
>>DL DPCH To Add 7.68Mcps		01	9.2.1.00	Applicable to 7.68Mcps TDD only	YES	reject
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>TDD DPCH Offset	М		9.2.3.19A		_	
>>>DL Timeslot Information 7.68Mcps	М		9.2.3.39		_	
DL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		-	
DCHs To Modify	0		DCHs TDD To Modify 9.2.3.4D		YES	reject

BOUL T. ALL	0	1	DCH TDD	1	YES	reject
DCHs To Add			Information		TES	reject
			9.2.3.4C			
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
DSCH To Modify		0 <maxno ofDSCHs&gt;</maxno 			GLOBAL	reject
>DSCH ID	M		9.2.3.5a		_	
>CCTrCH ID	0		9.2.3.3	DL CCTrCH in which the DSCH is mapped	_	
>Transport Format Set	0		9.2.1.59		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Frame Handling Priority	0		9.2.1.30		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH To Add	0		DSCH TDD Information 9.2.3.5A		YES	reject
DSCH To Delete		0 <maxno ofDSCHs&gt;</maxno 			GLOBAL	reject
>DSCH ID	М		9.2.3.5a		_	
USCH To Modify		0 <maxno ofUSCHs&gt;</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&gt;</maxno 			GLOBAL	reject
>USCH ID	М		9.2.3.27		_	
RL Information		0 <maxno ofRLs&gt;</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		-	
>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 or 7.68Mcps 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
>UARFCN	0		9.2.1.65	Applicable to 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt [15]	YES	reject
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH Information To Modify	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
PDSCH-RL-ID	0		RL ID 9.2.1.53		YES	ignore
E-DCH Information		01		3.84Mcps TDD only	YES	reject
>E-PUCH Information	0	I	9.2.3.45	1	_	

>E-DCH MAC-d Flows to	0		9.2.3.47		-	
>E-DCH MAC-d Flows to	0	+	9.2.1.73			
Delete	0		9.2.1.73		_	
>E-DCH Non-scheduled	0		9.2.3.48		_	
Grant Information TDD			9.2.3.40		_	
>E-DCH TDD Information	0		9.2.3.49		_	
>E-DCH TDD Information to	0		9.2.3.52		_	
Modify			9.2.3.32		_	
E-DCH Serving RL	0		9.2.1.53		YES	reject
E-DCH Information		01	0.2.1.00	7.68Mcps TDD	YES	reject
7.68Mcps		01		only	120	10,000
>E-PUCH Information	0	+	9.2.3.45	Only	_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to	0		9.2.3.47		_	
Add	~		5.2.5.77		-	
>E-DCH MAC-d Flows to	0		9.2.1.73		_	
Delete			5.2.1.76			
>E-DCH Non-scheduled	0		9.2.3.64		_	
Grant Information 7.68Mcps			0.2.0.0			
TDD						
>E-DCH TDD Information	0		9.2.3.65		_	
7.68Mcps						
>E-DCH TDD Information to	0		9.2.3.52		_	
Modify						
E-DCH Information		01		1.28Mcps TDD	YES	reject
1.28Mcps				only		
>E-PUCH Information LCR	0		9.2.3.45a		_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to	0		9.2.3.47		_	
Add						
>E-DCH MAC-d Flows to	0		9.2.1.73		_	
Delete						
>E-DCH Non-scheduled	0		9.2.3.48a		_	
Grant Information LCR TDD						
>E-DCH TDD Information	0		9.2.3.49a		-	
LCR						
>E-DCH TDD Information to	0		9.2.3.52		_	
Modify						
Power Control GAP	0		INTEGER	Unit: Number of	YES	ignore
			(1255)	subframes		
				Applicable to		
				1.28Mcps TDD		
	]			only		

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoof RLs are represented by separate ASN.1 structures with different criticalities.

Condition	Explanation
HSDSCHRadioLink	The IE shall be present if HS-PDSCH RUID IE is present.

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD.
	Maximum number of uplink DPCHs in one CCTrCH for 7.68Mcps TDD
maxnoofDPCHsLCR	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD
maxnoofDPCHs768	Maximum number of downlink DPCHs in one CCTrCH for 7.68Mcps
	TDD
maxnoofDSCHs	Maximum number of DSCHs for one UE
maxnoofUSCHs	Maximum number of USCHs for one UE
maxnoofDLts	Maximum number of Downlink time slots per Radio Link for 3.84Mcps
	TDD
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps
	TDD
maxnoofULts	Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD
maxnoofRLs	Maximum number of RLs for one UE

# 9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	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&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>DCH Information	0		9.2.1.20C		YES	ignore
Response						
>DSCH Information	0		9.2.3.5b	TDD only	YES	ignore
Response						
>USCH Information	0		9.2.3.29	TDD only	YES	ignore
Response				_		_
>Not Used	0		NULL		-	
>DL Power Balancing	0		9.2.2.12D		YES	ignore
Updated Indicator						
>E-DCH RL Set ID	0		RL Set ID		YES	ignore
7 2 2 3 1 1 1 2 3 1 1 2			9.2.2.39			
>E-DCH FDD DL Control	0		9.2.2.13Dc		YES	ignore
Channel Information						
>E-DCH FDD Information	0		9.2.2.13Db		YES	ignore
Response						
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 TDD Information Response	0		E-DCH TDD Information Response 9.2.3.50	TDD only	YES	ignore
MAC-hs Reset Indicator	0		9.2.1.38Ac		YES	ignore
Fast Reconfiguration Permission	0		9.2.2.63	FDD only	YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69	FDD only	YES	ignore
Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>HS-DSCH FDD Secondary Serving	М		9.2.2.18EA	FDD only	_	
Information Response						

Range Bound Explanation			
maxnoofRLs	Maximum number of RLs for a UE		
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE		

### 9.1.44 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and 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
CHOICE Cause Level	M				YES	ignore
>General						
>>Cause	M		9.2.1.6		YES	ignore
>RL Specific						
>>RLs Causing Reconfiguration Failure		0 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	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	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	The reserved value "All NBCC' shall not be used.	YES	ignore
CFN	М		9.2.1.7		YES	ignore
Active Pattern Sequence Information	0		9.2.2.A	FDD only	YES	ignore
Fast Reconfiguration Mode	0		9.2.2.62	FDD only	YES	reject

# 9.1.46 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the UL.	_	
>UL DPDCH Indicator For	0		9.2.2.61		YES	reject
E-DCH Operation						
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the DL.	_	
>TFCI Signalling Mode	0		9.2.2.50		_	
>Limited Power Increase	0	1	9.2.2.18A		_	
DCHs To Modify	0		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4D		YES	reject
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	reject
>DCH ID	M		9.2.1.20		_	
Radio Link Information		0 <maxno ofRLs&gt;</maxno 			EACH	reject
>RL ID	M		9.2.1.53		_	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH or on F-DPCH	_	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH or on F-DPCH	_	
>DL Code Information	C-SF/2		FDD DL Code Information 9.2.2.14A		_	
>DL Reference Power	0		DL Power 9.2.1.21	Power on DPCH or on F- DPCH	YES	ignore
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
>E-DCH RL Indication	0		9.2.2.13De		YES	reject
>RL Specific E-DCH	0		9.2.2.39a		YES	ignore
Information						
>F-DPCH Slot Format	0		9.2.2.93		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		YES	reject

			9.2.2.18D			
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.31HA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.53		YES	reject
E-DPCH Information		01	0.2.1.00		YES	reject
>Maximum Set of E- DPDCHs	0		9.2.2.20C		_	- 7
>Puncture Limit	0		9.2.1.50		_	
>E-TFCS Information	0		9.2.2.13Dh		_	
>E-TTI	0	1	9.2.2.13Di		_	
>E-DPCCH Power Offset	0		9.2.2.13Dj		_	
>E-RGCH 2-Index-Step Threshold	0		9.2.2.13lg		-	
>E-RGCH 3-Index-Step Threshold	0		9.2.2.13lh		_	
>HARQ Info for E-DCH	0		9.2.2.18ba		_	
>HS-DSCH Configured Indicator	0		9.2.2.18Ca		_	
> Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.114		YES	ignore
E-DCH FDD Information	0		E-DCH FDD Information 9.2.2.13Da		YES	reject
E-DCH FDD Information To Modify	0		9.2.2.13Df		YES	reject
E-DCH MAC-d Flows To Add	0		E-DCH FDD MAC-d Flows Information 9.2.2.13M		YES	reject
E-DCH MAC-d Flows To Delete	0		9.2.1.73		YES	reject
Serving E-DCH RL	0		9.2.2.48B		YES	reject
CPC Information		01			YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.66		_	
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.67		_	
>Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68		-	
>Continuous Packet Connectivity HS-SCCH less Deactivate Indicator	0		9.2.2.69A		YES	reject
No of Target Cell HS-SCCH Order	0		INTEGER (130)		YES	ignore
Additional HS Cell Information RL Reconf Req		0 <maxno ofHSDSC H-1&gt;</maxno 	(55)	For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	reject

>HS-PDSCH RL ID	М	RL ID	_	
		9.2.1.53		
>C-ID	0	9.2.1.9	_	
>HS-DSCH FDD	0	9.2.2.18Da	_	
Secondary Serving				
Information				
>HS-DSCH FDD	0	9.2.2.18EC	_	
Secondary Serving				
Information To Modify				
Unsynchronised				
>HS-DSCH Secondary	0	NULL	_	
Serving Remove				

Range Bound Explanation			
maxnoofDCHs	Maximum number of DCHs for a UE		
maxnoofRLs	Maximum number of RLs for a UE		
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE		

Condition	Explanation
SF/2	The IE shall be present if the Transmission Gap Pattern Sequence
	Information IE is included and the indicated Downlink Compressed
	Mode method for at least one of the included Transmission Gap Pattern
	Sequence is set to "SF/2".
HSDSCH Radio Link	The IE shall be present if HS-PDSCH RL ID IE is present.

# 9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
UL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>Puncture Limit	0		9.2.1.50		_	
>UL SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		-	
DL CCTrCH To Modify		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>Puncture Limit	0		9.2.1.50		_	
>DL CCTrCH To Modify Per RL		0 <maxno ofRLs&gt;</maxno 		See note 1 below		
>>DL DPCH To Modify LCR		01		Applicable to 1.28Mcps TDD only	YES	ignore
>>>DL Timeslot Information LCR		0 <maxno ofDLtsLCR &gt;</maxno 			-	
>>>Time Slot LCR	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
>>RL ID	0		9.2.1.53		YES	ignore
DL CCTrCH To Delete		0 <maxno ofCCTrCH s&gt;</maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		-	
DCHs To Modify	0		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.4C		YES	reject
DCHs To Delete		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	reject

>DCH ID	М		9.2.1.20		_	
RL Information		0 <maxno ofRLs&gt;</maxno 		See note 1 below	YES	reject
>RL ID	М		9.2.1.53		_	
>Maximum Downlink Power	0		DL Power 9.2.1.21		_	
>Minimum Downlink Power	0		DL Power 9.2.1.21		_	
>RL Specific DCH Information	0		9.2.1.53G		YES	ignore
		01		Mandatory for	YES	ianoro
>UL Synchronisation Parameters LCR		01		1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	163	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		-	
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	reject
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.31HA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.53		YES	reject
E-DCH Information		01		3.84Mcps TDD only	YES	reject
>E-PUCH Information	0		9.2.3.45		_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.47		_	
>E-DCH MAC-d Flows to Delete	0		9.2.1.73		_	
>E-DCH Non-scheduled Grant Information TDD	0		9.2.3.48		_	
>E-DCH TDD Information	0		9.2.3.49		_	
>E-DCH TDD Information to Modify	0		9.2.3.52		_	
E-DCH Serving RL	0		9.2.1.53		YES	reject
E-DCH Information 7.68Mcps		01		7.68Mcps TDD only	YES	reject
>E-PUCH Information	0		9.2.3.45		_	
>E-TFCS Information TDD	0		9.2.3.46		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.47		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.73		_	
>E-DCH Non-scheduled Grant Information 7.68Mcps TDD	0		9.2.3.64		-	

>E-DCH TDD Information 7.68Mcps	0		9.2.3.65		_	
>E-DCH TDD Information to Modify	0		9.2.3.52		_	
E-DCH Information		01		1.28Mcps TDD	YES	reject
1.28Mcps				only		
>E-PUCH Information LCR	0		9.2.3.45a		-	
>E-TFCS Information TDD	0		9.2.3.46		-	
>E-DCH MAC-d Flows to	0		9.2.3.47		-	
Add						
>E-DCH MAC-d Flows to	0		9.2.1.73		-	
Delete						
>E-DCH Non-scheduled	0		9.2.3.48a		1	
Grant Information LCR TDD						
>E-DCH TDD Information	0		9.2.3.49a		1	
LCR						
>E-DCH TDD Information to	0		9.2.3.52		_	
Modify						
Power Control GAP	0		INTEGER	Unit: Number of	YES	ignore
			(1255)	subframes		
				Applicable to		
				1.28Mcps TDD		
				only		

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofRLs are represented by separate ASN.1 structures with different criticality.

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofRLs	Maximum number of RLs for one UE

Condition	Explanation
HSDSCHRadioLink	The IE shall be present if HS-PDSCH RL ID IE is present.

# 9.1.48 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	10,000
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
RL Information Response		0 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	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
>E-DCH FDD Information Response	0		9.2.2.13Db		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 TDD Information Response	0		E-DCH TDD Information Response 9.2.3.50	TDD only	YES	ignore
MAC-hs Reset Indicator	0		9.2.1.38Ac		YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69	FDD only	YES	ignore
Additional HS Cell Information Response		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	M		RL ID 9.2.1.53		_	
>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.18EA	FDD only	-	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for a UE
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.1.49 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	reject
CRNC Communication Context ID	М		9.2.1.18		YES	reject
RL Information		1 <maxno ofRLs&gt;</maxno 			EACH	notify
>RL ID	M		9.2.1.53		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE

### 9.1.50 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.51 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	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
Power Adjustment Type	М		9.2.2.27		YES	ignore
DL Reference Power	C- Common		DL power 9.2.1.21	Power on DPCH or on F-DPCH	YES	ignore
Inner Loop DL PC Status	0		9.2.2.18B		YES	ignore
DL Reference Power Information	C- Individual	1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>DL Reference Power	M		DL power 9.2.1.21	Power on DPCH or on F-DPCH	-	
Max Adjustment Step	C- CommonO rIndividual		9.2.2.20		YES	ignore
Adjustment Period	C- CommonO rIndividual		9.2.2.B		YES	ignore
Adjustment Ratio	C- CommonO rIndividual		9.2.2.C		YES	ignore

Condition	Explanation
Common	The IE shall be present if the Adjustment Type IE is equal to "Common".
Individual	The IE shall be present if the Adjustment Type IE is equal to "Individual".
CommonOrIndividual	The IE shall be present if the Adjustment Type IE is equal to "Common"
	or "Individual".

Range Bound	Explanation
maxnoofRLs	Maximum number of Radio Links for a UE

# 9.1.52 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC' shall not be used when the Report characteristics type is set to "On Demand".	YES	reject
Measurement ID	M		9.2.1.42		YES	reject
CHOICE Dedicated	M				YES	reject
Measurement Object Type						
>RL						
>>RL Information		1 <maxno ofRLs&gt;</maxno 			EACH	reject
>>>RL ID	M		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>PUSCH Information		0 <maxno ofPUSCHs &gt;</maxno 		TDD only	GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		_	
>>>HS-SICH Information		0 <maxno ofHSSICH s&gt;</maxno 		TDD only	GLOBAL	reject
>>>>HS-SICH ID	M		9.2.3.5Gb	For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored	_	
>>>>Extended HS-SICH ID	0		9.2.3.5K	Applicable to 1.28Mcps TDD only, the Extended HS- SICH ID IE shall be used if the HS-SICH identity has a value larger than 31. See note 1 below.	_	
>>>DPCH ID 7.68Mcps	0		9.2.3.42	Included for 7.68Mcps TDD for downlink DPCH	YES	reject
>RLS				FDD only		
>>RL Set Information		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	

		ofRLSets>				
>>>RL Set ID	M		9.2.2.39		_	
>ALL RL			NULL			
>ALL RLS			NULL	FDD only		
Dedicated Measurement Type	M		9.2.1.23		YES	reject
Measurement Filter Coefficient	0		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject
CFN Reporting Indicator	M		FN Reporting Indicator 9.2.1.29B		YES	reject
CFN	0		9.2.1.7		YES	reject
Number Of Reported Cell Portions	C- BestCellP ortionsMe as		9.2.2.23D	FDD only	YES	reject
Measurement Recovery Behavior	0		9.2.1.43A		YES	ignore
Alternative Format Reporting Indicator	0		9.2.1.1B		YES	ignore

Note 1: This information element is a simplified representation of the ASN.1.

Condition	Explanation
BestCellPortionsMeas	The IE shall be present if the Dedicated Measurement Type IE is set to
	"Best Cell Portions".

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs a measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on
maxnoofHSSICHs	Maximum number of HSSICHs per RL a measurement can be started
	on

# 9.1.53 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		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&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>Dedicated Measurement Value	М		9.2.1.24		1	
>>>CFN	0		9.2.1.7	Dedicated Measurement Time Reference	_	
>>>PUSCH Information		0 <maxno ofPUSCHs &gt;</maxno 		TDD only See note 3	GLOBAL	reject
>>>PUSCH ID	М		9.2.3.12		_	
>>>>Dedicated Measurement Value	0		9.2.1.24		_	
>>>HS-SICH ID	0		9.2.3.5Gb	TDD only For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored	YES	reject
>>>Multiple Dedicated Measurement Value Information		0 <maxno ofDPCHsP erRL-1&gt;</maxno 		Applicable to 3.84Mcps TDD only	GLOBAL	ignore
>>>DPCH ID	M		9.2.3.5		_	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>Multiple Dedicated Measurement Value Information LCR		0 <maxno ofDPCHsL CRPerRL- 1&gt;</maxno 		Applicable to 1.28McpsTDD only	GLOBAL	ignore
>>>DPCH ID	M		9.2.3.5		_	
>>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>Multiple HS-SICH		0 <maxno< td=""><td></td><td>TDD only</td><td>GLOBAL</td><td>ignore</td></maxno<>		TDD only	GLOBAL	ignore

Measurement Value Information		ofHSSICH				
>>>HS-SICH ID	M	s-1>	9.2.3.5Gb	For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored	-	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>Extended HS- SICH ID	0		9.2.3.5K	Applicable to 1.28Mcps TDD only, the Extended HS- SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	ignore
>>>DPCH ID 7.68Mcps	0		9.2.3.42	Included for 7.68Mcps TDD for downlink DPCH	YES	reject
>>>Multiple Dedicated Measurement Value Information 768Mcps		0 <maxno ofDPCHs7 68PerRL- 1&gt;</maxno 		Applicable to 7.68McpsTDD only	GLOBAL	ignore
>>>>DPCH ID 7.68Mcps	М		9.2.3.42		ı	
>>>>Dedicated Measurement Value	М		9.2.1.24		ı	
>>>Extended HS-SICH ID	0		9.2.3.5K	Applicable to 1.28Mcps TDD only, the Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	reject
>RLS or ALL RLS				FDD only See Note 2		
>>RL Set Information		1 <maxno ofRLSets&gt;</maxno 			EACH	ignore
>>>RL Set ID >>>Dedicated	M		9.2.2.39 9.2.1.24			
Measurement Value						
>>>CFN	0		9.2.1.7	Dedicated Measurement Time Reference	-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Measurement Recovery	0		9.2.1.43C		YES	ignore

0 (1 )			
Support Indicator			

Range Bound	Explanation
maxnoofRLs	Maximum number of individual RLs the measurement can be started on
maxnoofPUSCHs	Maximum number of PUSCHs per RL a measurement can be started on
maxnoofRLSets	Maximum number of individual RL Sets a measurement can be started on
maxnoofDPCHsPerRL	Maximum number of DPCHs per RL a measurement can be started on for 3.84Mcps TDD
maxnoofDPCHsLCRPerRL	Maximum number of DPCHs per RL a measurement can be started on for 1.28Mcps TDD
maxnoofHSSICHs	Maximum number of HSSICHs per RL a measurement can be started on
maxnoofDPCHs768PerRL	Maximum number of DPCHs per RL a measurement can be started on for 7.68Mcps TDD

- Note 1: This is a simplified representation of the ASN.1: there are two different choice tags "RL" and "ALL RL" in the ASN.1, each having exactly the same structure.
- Note 2: This is a simplified representation of the ASN.1: there are two different choice tags "RLS" and "ALL RLS" in the ASN.1, each having exactly the same structure.
- Note 3: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofPUSCHs are represented by separate ASN.1 structures with different criticality.

#### 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

Transaction ID	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Transaction ID	Message Discriminator	М		9.2.1.45		_	
Transaction ID	Message Type	М		9.2.1.46		YES	ignore
Measurement ID		M		9.2.1.62		_	
Dedicated   Measurement   Deject Type   M		M		9.2.1.18	value "All CRNCCC" shall	YES	ignore
Measurement Object Type         Measurement Object Type the measurement was initiated with         Measurement Object Type the measurement was initiated with           >>RL or ALL RL         1 <maxno offrls="">         See Note 1           &gt;&gt;&gt;RL Information         1<maxno offrls="">         EACH ign           &gt;&gt;&gt;DPCH ID         0         9.2.1.53         TDD only           &gt;&gt;&gt;Dedicated Measurement Value Information         M         9.2.1.24A         -           &gt;&gt;&gt;PUSCH ID         M         9.2.3.12         -           &gt;&gt;&gt;&gt;Dedicated Measurement Value         O         9.2.3.12         -           &gt;&gt;&gt;&gt;Dedicated Measurement Value         O         9.2.3.5Gb         TDD only For 1.28Mcps TDD, if the Extended HS-SICH ID IE is included in the HS-SICH ID IE shall be ignored         For 1.28Mcps TDD for downlink DPCH           &gt;&gt;&gt;DPCH ID 7.68Mcps         O         9.2.3.42 Included for 7.68Mcps TDD for downlink DPCH         YES rej           &gt;&gt;&gt;Extended HS-SICH ID         O         9.2.3.5K         Applicable to 1.28Mcps TDD only, the Extended HS-Extended HS-IDD only, the Extended HS-IDD only, the IDD only in IDD only i</maxno></maxno>	Measurement ID	M		9.2.1.42		YES	ignore
Second   S		M			Measurement Object Type the measurement was initiated	YES	ignore
Some content of the	>RL or ALL RL				See Note 1		
>>>DPCH ID         O         9.2.3.5         TDD only         —           >>>Dedicated Measurement Value Information         M         9.2.1.24A         —           Information         Omaxno ofPUSCHs         TDD only See note 3         GLOBAL rej           >>>PUSCH ID         M         9.2.3.12         —           >>>>Dedicated Measurement Value         O         9.2.3.5Gb         TDD only For 1.28Mcps TDD, if the Extended HS-SICH ID IE is included in the HS-SICH ID IE shall be ignored         TDD only For 1.28Mcps TDD, if the HS-SICH ID IE shall be ignored           >>>DPCH ID 7.68Mcps         O         9.2.3.42         Included for 7.68Mcps TDD for downlink DPCH         YES         rej           >>>Extended HS-SICH ID ID         O         9.2.3.5K         Applicable to 1.28Mcps TDD only, the Extended HS-Extended HS-Exten	>>RL Information					EACH	ignore
>>>Dedicated Measurement Value Information         M         9.2.1.24A         - <t< td=""><td>&gt;&gt;&gt;RL ID</td><td>М</td><td></td><td>9.2.1.53</td><td></td><td>_</td><td></td></t<>	>>>RL ID	М		9.2.1.53		_	
Measurement Value   Information	>>>DPCH ID	0		9.2.3.5	TDD only	_	
Information	Measurement Value	М		9.2.1.24A		-	
>>>>Dedicated Measurement Value         0         9.2.1.24         -	Information		ofPUSCHs		•	GLOBAL	reject
Measurement Value	>>>>PUSCH ID					_	
For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be ignored  >>>DPCH ID 7.68Mcps O 9.2.3.42 Included for 7.68Mcps TDD for downlink DPCH  >>>Extended HS-SICH ID  9.2.3.5K Applicable to 1.28Mcps TDD only, the Extended HS-						_	
7.68Mcps TDD for downlink DPCH  >>>Extended HS-SICH O 9.2.3.5K Applicable to 1.28Mcps TDD only, the Extended HS-		O			For 1.28Mcps TDD, if the Extended HS- SICH ID IE is included in the HS-SICH Information IE, the HS-SICH ID IE shall be		reject
ID 1.28Mcps TDD only, the Extended HS-	>>>DPCH ID 7.68Mcps	0		9.2.3.42	7.68Mcps TDD for downlink	YES	reject
shall be used if the HS-SICH identity has a value larger than 31.		0		9.2.3.5K	1.28Mcps TDD only, the Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger	YES	ignore
>RLS or ALL RLS FDD only	> DI S or ALL DI S		1				

				See Note 2		
>>RL Set Information		1 <maxno ofrlsets=""></maxno>			EACH	ignore
>>>RL Set ID	M		9.2.2.39		_	
>>>Dedicated Measurement Value Information	М		9.2.1.24A		_	
Measurement Recovery Reporting Indicator	0		9.2.1.43B		YES	ignore

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.
- Note 3: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofPUSCHs are represented by separate ASN.1 structures with different criticality.

#### 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	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore

# 9.1.58 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>RL						
>>RL Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
>RL Set				FDD only		
>>RL Set Information		1 <maxno ofRLSets&gt;</maxno 			EACH	ignore
>>>RL Set ID	M		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&gt;</maxno 			EACH	ignore
>>>CCTrCH ID	M		9.2.3.3		_	
>>>Cause	M		9.2.1.6			

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofRLSets	Maximum number of RL Sets for one UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

# 9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only		
>>Radio Link Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>RL Set				FDD only		
>>RL Set Information		1 <maxno ofRLSets&gt;</maxno 			EACH	ignore
>>>RL Set ID	М		9.2.2.39		_	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.53		_	
>>CCTrCH List		1 <maxno ofCCTrCH s&gt;</maxno 			EACH	ignore
>>>CCTrCH ID	М		CCTrCH ID 9.2.3.3		-	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE
maxnoofRLSets	Maximum number of RL Sets for one UE
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

# 9.1.60 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	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	М		9.2.2.A		YES	ignore

### 9.1.61 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
CRNC Communication Context ID	0		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	0		9.2.1.48	The reserved value "All NBCC' shall not be used.	YES	ignore
Cause	0		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST

### 9.1.62.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
SFN	0		9.2.1.53A		YES	reject
HS-PDSCH, HS-SCCH,E- AGCH, E-RGCH and E-HICH Total Power	0		Maximum Transmissio n Power 9.2.1.40	Maximum transmission power to be allowed for HS- PDSCH, HS- SCCH, E- AGCH, E- RGCH and E- HICH codes	YES	reject
HS-PDSCH And HS-SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which HS-PDSCH and HS-SCCH is transmitted. 0= Primary scrambling code of the cell 115 = Secondary scrambling code	YES	reject
HS-PDSCH FDD Code Information	0		9.2.2.18F		YES	reject
HS-SCCH FDD Code Information	0		9.2.2.18G		YES	reject

		I	I	T	\/F0	<del> </del>
E-AGCH And E-RGCH/E-	0		DL	Scrambling	YES	reject
HICH FDD Scrambling Code			Scrambling	code on which		
			Code	E-AGCH, E-		
			9.2.2.13	RGCH and E-		
				HICH are		
				transmitted.		
				0= Primary scrambling		
				code of the cell		
				115 =		
				Secondary		
				scrambling code		
E-AGCH Code FDD	0		9.2.2.13lb	0000	YES	reject
Information						
E-RGCH/E-HICH Code FDD	0		9.2.2.13la		YES	reject
Information						
HSDPA And E-DCH Cell		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
Portion Information		ofCellPorti ons>				
>Cell Portion ID	М	,	9.2.2.1Ca		_	
>HS-PDSCH And HS-	0		DL	Scrambling	-	
SCCH Scrambling Code			Scrambling	code on which HS-PDSCH		
			Code	and HS-SCCH		
			9.2.2.13	is transmitted		
				over cell		
				portion.		
>HS-PDSCH FDD Code	0		9.2.2.18F		_	
Information			0.00.400			
>HS-SCCH FDD Code	0		9.2.2.18G		_	
Information >HS-PDSCH, HS-SCCH, E-	0		Maximum	Maximum	_	
AGCH, E-RGCH and E-			Transmissio	transmission	_	
HICH Total Power			n Power	power to be		
Therriotair ower			9.2.1.40	allowed for HS-		
				PDSCH, HS- SCCH and E-		
				AGCH, E-		
				RGCH and E-		
				HICH codes		
				over cell portion		
>E-AGCH And E-RGCH/E-	0		DL	Scrambling	_	
HICH FDD Scrambling			Scrambling	code on which		
Code			Code	E-AGCH, E-		
			9.2.2.13	RGCH and E- HICH are		
				transmitted		
				over cell		
<b>-</b>				portion.		
>E-AGCH Code FDD	0		9.2.2.13lb		-	
Information >E-RGCH/E-HICH Code	0		9.2.2.13la		_	
FDD Information			J. Z. Z. I JIA			
Maximum Target Received	0		9.2.2.21a		YES	reject
Total Wide Band Power						-
Reference Received Total	0		9.2.2.39B		YES	ignore
Wide Band Power						
Target Non-serving E-DCH to	0		9.2.2.21b		YES	reject
Total E-DCH Power ratio						
HS-DSCH Common System	0		9.2.2.75		YES	reject
Information	1					

Common MAC Flows to Delete	0	9.2.2.97	YES	S reject
HS-DSCH Paging System Information	0	9.2.2.76	YES	S reject
Paging MAC Flows to Delete	0	9.2.2.98	YES	s reject
Common E-DCH System Information	0	9.2.2.103	YES	S Reject
Common UL MAC Flows to Delete	0	Common MAC Flows to Delete 9.2.2.97	YES	S Reject
Common E-DCH MAC-d Flows to Delete	0	E-DCH MAC Flows to Delete 9.2.1.73	YES	S Reject
Enhanced UE DRX Information	0	9.2.2.108	YES	S reject

Range Bound	Explanation
MaxNoofCellPortions	Maximum number of Cell Portions in a cell

# 9.1.62.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	М		9.2.1.9		YES	reject
SFN	0		9.2.1.53A		YES	reject
PDSCH Sets To Add		0 <maxno ofPDSCH Sets&gt;</maxno 			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		_	
>PDSCH To Add Information		01		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>DL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofDLts>				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift And Burst Type	М		9.2.3.7		_	
>>>TFCI Presence	М		9.2.1.57		_	
>>>DL Code Information		1 <maxno ofPDSCHs &gt;</maxno 			-	
>>>PDSCH ID	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 or 7.68Mcps TDD.	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical	М		9.2.3.20		_	
Channel Offset						
>>DL Timeslot Information LCR		1 <maxno ofDLtsLCR &gt;</maxno 			_	
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		_	
>>>TFCI Presence	М		9.2.1.57		_	
>>>DL Code Information LCR		1 <maxno ofPDSCHs &gt;</maxno 			-	
>>>>PDSCH ID	М		9.2.3.10		_	
>>>>TDD	M		9.2.3.19a		_	
Channelisation Code LCR						
>>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.19D		YES	reject
>>TSTD Indicator	0		9.2.1.64		YES	reject
>PDSCH To Add		01		Mandatory for	YES	reject
Information 7.68Mcps				7.68Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84Mcps TDD.		
>>Repetition Period	M		9.2.3.16	·	_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD Physical	M		9.2.3.20		_	
Channel Offset						
>>DL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofDLts>				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift	М		9.2.3.35		_	
And Burst Type						
7.68Mcps	1					
>>>TFCI Presence	М		9.2.1.57			
>>>DL Code Information 7.68Mcps		1 <maxno ofPDSCHs</maxno 			_	
>>>>PDSCH ID	M	>	9.2.3.43		_	
7.68Mcps			3.2.3.10			
>>>>TDD	М		9.2.3.34		_	
Channelisation Code 7.68Mcps						
PDSCH Sets To Modify		0 <maxno of PDSCHSe ts&gt;</maxno 			GLOBAL	reject

>CHOICE HCR or LCR or 7.68 Mcps	М			See note 1 below	_	
>>3.84Mcps TDD					_	
>>>PDSCH To Modify Information		1			YES	reject
>>>>Repetition Period	0		9.2.3.16		_	
>>>Repetition Length	0		9.2.3.15		_	
>>>>TDD Physical Channel Offset	0		9.2.3.20		-	
>>>>DL Timeslot Information		0 <maxno ofDLts&gt;</maxno 			-	
>>>>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 Information		0 <maxno ofPDSCHs &gt;</maxno 			-	
>>>>PDSCH ID	М		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>>1.28Mcps TDD  >>>PDSCH To Modify		1			YES	reject
Information LCR >>>>Repetition Period	0		9.2.3.16		-	
>>>Repetition Length	0		9.2.3.15		_	
>>>>TDD Physical Channel Offset	0		9.2.3.20		-	
>>>DL Timeslot Information LCR		0 <maxno ofDLtsLCR</maxno 			-	
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>>Midamble Shift LCR	0		9.2.3.7A		-	
>>>>TFCI Presence	0		9.2.1.57		-	
>>>>DL Code Information LCR		0 <maxno ofPDSCHs &gt;</maxno 			-	
>>>>PDSCH ID	М		9.2.3.10		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		_	
>>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.19D		YES	reject
>>7.68Mcps TDD					_	
>>>PDSCH To Modify Information 7.68Mcps		1			YES	reject

			1	1		
>>>Repetition Period	0		9.2.3.16		-	
>>>Repetition Length	0		9.2.3.15		_	
>>>>TDD Physical Channel Offset	0		9.2.3.20		_	
>>>>DL Timeslot		0 <maxno ofDLts&gt;</maxno 			_	
Information 7.68Mcps		OIDEI32				
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.35		-	
>>>>TFCI Presence	0		9.2.1.57		_	
>>>>DL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofPDSCHs >				
>>>>PDSCH ID 7.68Mcps	M		9.2.3.43		_	
>>>>TDD	М		9.2.3.34		_	
Channelisation Code 7.68Mcps						
PDSCH Sets To Delete		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
		of				
		PDSCHSe ts>				
>PDSCH Set ID	M	13>	9.2.3.11		_	
PUSCH Sets To Add	141	0 <maxno< td=""><td>0.2.0.11</td><td></td><td>GLOBAL</td><td>reject</td></maxno<>	0.2.0.11		GLOBAL	reject
POSCH Sets TO Add		of PUSCHSe			OLOD/(L	rojoot
		ts>				
>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 or 7.68Mcps TDD.		
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical	М		9.2.3.20		-	
Channel Offset		4				
>>UL Timeslot		1 <maxno ofULts&gt;</maxno 			_	
Information	M	0.02.07	9.2.3.23			
>>>Time Slot	M		9.2.3.23		_	
>>>Midamble Shift	IVI		3.2.3.1		_	
And Burst Type	M		9.2.1.57		_	
>>>TFCI Presence	IVI	1 <maxno< td=""><td>3.2.1.37</td><td></td><td></td><td></td></maxno<>	3.2.1.37			
>>>UL Code Information		ofPUSCHs			_	
>>>PUSCH ID	М		9.2.3.12		_	
>>>TDD	М		9.2.3.19		_	
Channelisation Code						
>PUSCH To Add Information LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject

	I	1	00040			
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>UL Timeslot Information LCR		1 <maxno ofULtsLCR &gt;</maxno 			-	
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		-	
>>>TFCI Presence	М		9.2.1.57		_	
>>>UL Code Information LCR		1 <maxno ofPUSCHs &gt;</maxno 			-	
>>>PUSCH ID	М		9.2.3.12		_	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
>>>>TDD UL DPCH Time Slot Format LCR	0		9.2.3.21C		YES	reject
>PUSCH To Add Information 7.68Mcps		01		Mandatory for 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD or 3.84 Mcps TDD.	YES	reject
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical Channel Offset	М		9.2.3.20		-	
>>UL Timeslot		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofULts>				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35		_	
>>>TFCI Presence	М		9.2.1.57		_	
>>>UL Code		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information 7.68Mcps		ofPUSCHs >				
>>>>PUSCH ID	М		9.2.3.12		_	
>>>TDD Channelisation Code 7.68Mcps	M		9.2.3.34		-	
PUSCH Sets To Modify		0 <maxno of PUSCHSe ts&gt;</maxno 			GLOBAL	reject
>PUSCH Set ID	М		9.2.3.13		_	
>CHOICE HCR or LCR or 7.68Mcps	М			See note 1 below	-	
>>3.84Mcps TDD					_	
>>>PUSCH To Modify		1			YES	reject
Information						
>>>Repetition Period	0		9.2.3.16		_	
>>>>Repetition Length	0		9.2.3.15		-	
>>>>TDD Physical Channel Offset	0		9.2.3.20		_	

	I	0 .mov.no			
>>>>UL Timeslot		0 <maxno ofults=""></maxno>		_	
Information		UIULIS>			
>>>>Time Slot	М		9.2.3.23	_	
>>>>Midamble	0		9.2.3.7	_	
Shift And Burst					
Type					
>>>>TFCI	0		9.2.1.57	_	
Presence					
>>>>UL Code		0 <maxno< td=""><td></td><td>_</td><td></td></maxno<>		_	
Information		ofPUSCHs			
mormation		>			
>>>>PUSCH	M		9.2.3.12	_	
ID					
>>>>TDD	M		9.2.3.19	_	
Channelisation					
Code					
>>1.28Mcps TDD				_	
>>>PUSCH To Modify		1		YES	reject
Information LCR		-			,
>>>Repetition	0		9.2.3.16		
			3.2.3.10		
Period	0		9.2.3.15		
>>>Repetition			9.2.3.13	_	
Length			0.000		
>>>TDD Physical	0		9.2.3.20	_	
Channel Offset					
>>>>UL Timeslot		0 <maxno< td=""><td></td><td>_</td><td></td></maxno<>		_	
Information LCR		ofULtsLCR			
Time a Olat	M	>	9.2.3.24A		
>>>>Time Slot	IVI		9.2.3.24A	_	
LCR	0		9.2.3.7A		
>>>>Midamble	0		9.2.3.7A	_	
Shift LCR			0.04.57		
>>>>TFCI	0		9.2.1.57	_	
Presence					
>>>>UL Code		0 <maxno< td=""><td></td><td>_</td><td></td></maxno<>		_	
Information LCR		ofPUSCHs			
>>>>PUSCH	M	>	9.2.3.12		
	IVI		3.2.3.12		
ID	l N4		0.2.2.40=		
>>>>TDD	M		9.2.3.19a	-	
Channelisation					
Code LCR			0.00010	V=0	
>>>>TDD UL	0		9.2.3.21C	YES	reject
DPCH Time Slot					
Format LCR					
>>7.68Mcps TDD				_	
>>>PUSCH To Modify		1		YES	reject
Information 7.68Mcps		<u> </u>			
>>>Repetition	0		9.2.3.16	 _	
Period					
>>>Repetition	0		9.2.3.15	_	
Length					
>>>>TDD Physical	0		9.2.3.20	_	
Channel Offset					
>>>UL Timeslot		0 <maxno< td=""><td></td><td></td><td></td></maxno<>			
Information		ofULts>			
7.68Mcps	M		9.2.3.23		
>>>>Time Slot	IVI		3.2.3.23		

>>>>Midamble Shift And Burst	0		9.2.3.35		_	
Type 7.68Mcps	0		9.2.1.57			
>>>>TFCI Presence			3.2.1.37		_	
>>>>UL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information		ofPUSCHs				
7.68Mcps		>				
>>>>PUSCH ID	М		9.2.3.12		-	
>>>>TDD	M		9.2.3.34		_	
Channelisation Code 7.68Mcps						
PUSCH Sets To Delete		0 <maxno ofPUSCH Sets&gt;</maxno 			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		_	
HS-PDSCH TDD		01			GLOBAL	reject
Information		0 "		Mandat		
>DL Timeslot and Code Information		0 <maxno ofDLts&gt;</maxno 		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	_	
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift And Burst Type	М		9.2.3.7		-	
>>Codes		1 <maxno ofHSPDS CHs&gt;</maxno 			-	
>>>TDD Channelisation Code	М		9.2.3.19		-	
>>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 per UARFCN		0 <maxfreq uencyinCe ll&gt;</maxfreq 		Mandatory for 1.28Mcps TDD Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. See note 2 below	EACH	reject
>>DL Timeslot and Code Information LCR		0 <maxno ofDLtsLCR</maxno 			_	
Code information Lor		>	0.00044			
	M	1	9.2.3.24A 9.2.3.7A		_	
>>>Time Slot LCR				1	ı —	
>>>Time Slot LCR >>>Midamble Shift LCR	M		9.2.3.7A			
>>>Midamble Shift		1 <maxno ofHSPDS CHs&gt;</maxno 	9.2.3.19		-	

		T	ı	1	\/F0	
>>>HS-PDSCH and	0		Maximum	Maximum	YES	reject
HS-SCCH Total Power			Transmissio	transmission power to be		
			n Power	allowed for HS-		
			9.2.1.40	PDSCH and		
				HS-SCCH		
				codes in the		
				timeslot		
>>UARFCN	0		9.2.1.65	Corresponds to	_	
				Nt [15]		
				Mandatory for		
				1.28Mcps TDD		
				when using multiple		
				frequencies.		
>DL Timeslot and Code		0 <maxno< td=""><td></td><td>Mandatory for</td><td>GLOBAL</td><td>reject</td></maxno<>		Mandatory for	GLOBAL	reject
		ofDLts>		7.68Mcps TDD.	OLODAL	10,000
Information 7.68Mcps		0.22.0		Not Applicable		
				to 1.28Mcps		
				TDD or 3.84		
				Mcps TDD.		
>>Time Slot	M		9.2.3.23		-	
>>Midamble Shift And	M		9.2.3.35			
Burst Type 7.68Mcps		1				
>>Codes 7.68Mcps		1 <maxno< td=""><td></td><td></td><td></td><td></td></maxno<>				
		ofHSPDS				
		CHs768>	00004			
>>>TDD	М		9.2.3.34		_	
Channelisation Code						
7.68Mcps						
>>HS-PDSCH and HS-	0		Maximum	Maximum	_	_
SCCH Total Power			Transmissio	transmission		
			n Power	power to be allowed for HS-		
			9.2.1.40	PDSCH and		
				HS-SCCH		
				codes in the		
				timeslot		
Add to HS-SCCH		01			GLOBAL	reject
Resource Pool						•
>HS-SCCH Information		0 <maxno< td=""><td></td><td>Applicable to</td><td>_</td><td></td></maxno<>		Applicable to	_	
		ofHSSCC		3.84Mcps TDD		
		Hs>		only		
>>HS-SCCH ID	M		9.2.3.5Ga			
>>Time Slot	М		9.2.3.23		_	
>>Midamble Shift And	M		9.2.3.7		_	
Burst Type						
>>TDD Channelisation	M		9.2.3.19		_	
Code						
>>Maximum HS-SCCH	М	†	DL Power		_	
Power			9.2.1.21			
>>HS-SICH Information	<del> </del>	1			_	
	M	+ '	9.2.3.5Gb		_	
>>>HS-SICH ID	M	+			_	
>>>Time Slot		1	9.2.3.23		_	
>>>Midamble Shift	М		9.2.3.7		_	
And Burst Type		1				
>>>TDD	М		9.2.3.19		_	
Channelisation Code						
>HS-SCCH Information		0 <maxno< td=""><td></td><td>Applicable to</td><td></td><td></td></maxno<>		Applicable to		
LCR		ofHSSCC		1.28Mcps TDD		
		Hs>		only		
				See note 3		
	L		l .	below		

	1	1	1	T		
>>HS-SCCH ID	M		9.2.3.5Ga	If the Extended HS-SCCH ID IE is included in the HS-SCCH Information LCR IE, the HS-SCCH ID IE shall be ignored.	-	
>>Time Slot LCR	М		9.2.3.24A		_	
>>Midamble Shift LCR	M		9.2.3.7A		_	
>>First TDD Channelisation Code	M		TDD Channelisat ion Code 9.2.3.19		-	
>>Second TDD Channelisation Code	M		TDD Channelisat ion Code 9.2.3.19		-	
>>Maximum HS-SCCH Power	М		DL Power 9.2.1.21		-	
>>HS-SICH Information LCR		1			_	
>>>HS-SICH ID	М		9.2.3.5Gb	If the Extended HS-SICH ID IE is included in the HS-SICH Information LCR IE, the HS-SICH ID IE shall be ignored.	-	
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble Shift LCR	М		9.2.3.7A		-	
>>>TDD Channelisation Code	М		9.2.3.19		_	
>>>Extended HS-SICH ID	0		9.2.3.5K	The Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	ignore
>>Extended HS-SCCH ID	0		9.2.3.5J	The Extended HS-SCCH ID IE shall be used if the HS-SCCH identity has a value larger than 31.	YES	ignore
>>UARFCN	O		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.	YES-	ignore
>HS-SCCH Information 7.68Mcps		0 <maxno ofHSSCC Hs&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	М		9.2.3.5Ga		_	
>>Time Slot	М		9.2.3.23		-	
>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35		_	

>>TDD Channelisation Code 7.68Mcps	M		9.2.3.34		_	
>>Maximum HS-SCCH Power	М		DL Power 9.2.1.21		_	
>>HS-SICH Information		1				
7.68Mcps		,			_	
>>>HS-SICH ID	M		9.2.3.5Gb		_	
>>>Time Slot	M		9.2.3.23		_	
>>>Midamble Shift	M		9.2.3.35		_	
And Burst Type	***		0.2.0.00			
7.68Mcps						
>>>TDD	M		9.2.3.34		_	
Channelisation Code						
7.68Mcps						
Modify HS-SCCH		01			GLOBAL	reject
Resource Pool						
>HS-SCCH Information		0 <maxno ofHSSCC Hs&gt;</maxno 		Applicable to 3.84Mcps TDD	-	
>>HS-SCCH ID	M	110/	9.2.3.5Ga	only	_	
>>Time Slot	0		9.2.3.23		_	
>>Midamble Shift And	0		9.2.3.7		_	
Burst Type						
>>TDD Channelisation	0		9.2.3.19		_	
Code						
>>Maximum HS-SCCH	0		DL Power		_	
Power			9.2.1.21			
>>HS-SICH Information		01			_	
>>>HS-SICH ID	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>_</td><td></td></maxno<>		Applicable to	_	
LCR		ofHSSCC Hs>		1.28Mcps TDD		
		115>		only See note 3		
				below		
>>HS-SCCH ID	M		9.2.3.5Ga	If the Extended	_	
				HS-SCCH ID IE		
				is included in the <i>HS-SCCH</i>		
				Information		
				LCR IE, the		
				HS-SCCH ID IE		
				shall be		
S Time Clat I CD	0	1	9.2.3.24A	ignored.		
>>Time Slot LCR >>Midamble Shift LCR	0		9.2.3.7A		_	
>>Midamble Shift LCR >>First TDD	0		TDD		_	
Channelisation Code			Channelisat			
Ghainichsalion Code			ion Code			
			9.2.3.19			
>>Second TDD	0		TDD Channelisat		_	
Channelisation 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	If the Extended HS-SICH ID IE is included in the HS-SICH Information LCR IE, the HS-SICH ID IE shall be ignored.	-	
>>>Time Slot LCR	0		9.2.3.24A		ı	
>>Midamble Shift LCR	0		9.2.3.7A		-	
>>>TDD Channelisation Code	0		9.2.3.19		-	
>>>Extended HS-SICH ID	0		9.2.3.5K	The Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.	YES	ignore
>>Extended HS-SCCH ID	0		9.2.3.5J	The Extended HS-SCCH ID IE shall be used if the HS-SCCH identity has a value larger than 31.	YES	ignore
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable to 1.28Mcps TDD when using multiple frequencies.	YES	ignore
>HS-SCCH Information 7.68Mcps		0 <maxno ofHSSCC Hs&gt;</maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	М	1162	9.2.3.5Ga	Office	_	
>>Time Slot	0		9.2.3.23		_	
>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35		-	
>>TDD Channelisation Code 7.68Mcps	М		9.2.3.34		-	
>>Maximum HS-SCCH Power	0		DL Power 9.2.1.21		-	
>>HS-SICH Information 7.68Mcps		01			-	
>>>HS-SICH ID	M		9.2.3.5Gb		_	
>>>Time Slot >>>Midamble Shift And Burst Type 7.68Mcps	O M		9.2.3.23 9.2.3.35		-	
>>>TDD Channelisation Code 7.68Mcps	M		9.2.3.34		-	

1.28Mcps TDD   Only, the   Extended HS-  SCCH ID IE   Shall be used if   the HS-SCCH   identity has a   value larger   than 31.	ignore
SHS-SCCH ID   M   9.2.3.5Ga   For 1.28Mcps   TDD, if the   Extended HS-  SCCH ID IE is included in the   Delete from   HS-SCCH   ID IE is included in the   Delete from   HS-SCCH   ID IE   Shall be ignored	
SCCH ID IE is included in the Delete from HS-SCCH Resource Pool IE, the HS-SCCH ID IE shall be ignored	
SExtended HS-SCCH ID   O	
1.28Mcps TDD   Only, the   Extended HS-  SCCH ID IE   Shall be used if   the HS-SCCH   identity has a   value larger   than 31.	
E-PUCH Information         01         3.84Mcps TDD only         GLOBAL only           >LTGI Presence         M         9.2.3.58         -           >SNPL Reporting Type         M         9.2.3.62         -           >Midamble Shift And Burst Type         M         9.2.3.7         -           Type         -         -         -           >E-PUCH Timeslot         1         -         -	reject
Only   SUPPRESENCE   M   9.2.3.58   -	
>SNPL Reporting Type         M         9.2.3.62         -           >Midamble Shift And Burst Type         M         9.2.3.7         -           >E-PUCH Timeslot         1 <maxno< td="">         -</maxno<>	reject
>Midamble Shift And Burst M 9.2.3.7 — Type >E-PUCH Timeslot 1<	
Type	
Information of EPUCHs lots>	
>>Time Slot	
Add to E-AGCH Resource Pool 3.84Mcps TDD GLOBAL only	reject
>E-AGCH Information         0 <maxno eag<="" of="" td="">         —           CHs&gt;         —</maxno>	
>>E-AGCH ID TDD	
>>Time Slot	
>>Midamble Shift And M 9.2.3.7 – Burst Type	
>>TDD Channelisation M 9.2.3.19 -	
>>Maximum E-AGCH M DL Power Power 9.2.1.21	
Modify E-AGCH Resource     01     3.84Mcps TDD only     GLOBAL only	reject

>E-AGCH Information		0 <maxno ofEAG CHs&gt;</maxno 			_	
>>E-AGCH ID TDD	М		9.2.3.51		_	
>>Time Slot	0		9.2.3.23		_	
>>Midamble Shift And	0		9.2.3.7		_	
Burst Type >>TDD Channelisation	0		9.2.3.19			
Code					_	
>>Maximum E-AGCH Power	0		DL Power 9.2.1.21		_	
Delete from E-AGCH		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
Resource Pool		ofEAG CHs>				-
>E-AGCH ID TDD	М	0.101	9.2.3.51		_	
E-HICH Information		01		3.84Mcps TDD only	GLOBAL	reject
>Midamble Shift And Burst Type	М		9.2.3.7		_	
>TDD Channelisation	M	1	9.2.3.19		_	
Code						
>Maximum E-HICH Power	M		DL Power 9.2.1.21		_	
Maximum Generated Received Total Wide Band Power in Other Cells	0		9.2.3.63	Applicable to 3.84Mcps and 7.68 Mcps TDD only	YES	reject
E-PUCH Information 7.68Mcps		01		7.68Mcps TDD only	GLOBAL	reject
>LTGI Presence	М		9.2.3.58	,	_	
>SNPL Reporting Type	M		9.2.3.62		_	
>Midamble Shift And Burst	M		9.2.3.35		_	
Type 7.68Mcps	IVI		9.2.3.33		_	
>E-PUCH Timeslot Information		1 <maxno ofEPUCHs lots&gt;</maxno 			-	
>>Time Slot	M	10132	9.2.3.23		_	
Add to E-AGCH Resource		01	0.2.0.20	7.68Mcps TDD	GLOBAL	reject
Pool 7.68Mcps				only	0202/12	. 0,001
>E-AGCH Information		0 <maxno< td=""><td></td><td>,</td><td></td><td></td></maxno<>		,		
>E-AGOIT IIIIOIIIIAIIOII		ofEAG CHs>			_	
>>E-AGCH ID TDD	М		9.2.3.51		_	
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35		_	
>>TDD Channelisation	М		9.2.3.34		_	
Code 7.68Mcps >>Maximum E-AGCH	M		DL Power		_	
Power		ļ	9.2.1.21			
Modify E-AGCH Resource Pool 7.68Mcps		01		7.68Mcps TDD only	GLOBAL	reject
>E-AGCH Information		0 <maxno ofEAG CHs&gt;</maxno 			-	
>>E-AGCH ID TDD	М		9.2.3.51		_	
>>Time Slot	0		9.2.3.23		_	
>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.35		-	
>>TDD Channelisation Code 7.68Mcps	0		9.2.3.34		-	
>>Maximum E-AGCH Power	0		DL Power 9.2.1.21		-	
E-HICH Information		01		7.68Mcps TDD only	GLOBAL	reject
7.68Mcps				Office		

>Midamble Shift And Burst Type 7.68Mcps >TDD Channelisation M Code 7.68Mcps >Maximum E-HICH Power M  E-PUCH Information 1.28Mcps >LTGI Presence M >SNPL Reporting Type M >E-PUCH Timeslot information 1.28Mcps per UARFCN >>E-PUCH Timeslot Information 1.28Mcps  >>>Time Slot LCR M >>>Midamble Shift M LCR >>>Codes LCR  Add to E-AGCH Resource Pool 1.28Mcps >E-AGCH Information 1.28Mcps	01  0 <maxfr cell="" equencyin=""> 0<maxno lotslcr="" ofepuchs="">  1<maxno odes="" ofepuchc=""></maxno></maxno></maxfr>	9.2.3.35 9.2.3.34 DL Power 9.2.1.21 9.2.3.58 9.2.3.62 9.2.3.62	1.28Mcps TDD only  See note 2 below	- GLOBAL - - -	reject
>TDD Channelisation Code 7.68Mcps >Maximum E-HICH Power M  E-PUCH Information 1.28Mcps >LTGI Presence M >SNPL Reporting Type M >E-PUCH Timeslot information 1.28Mcps per UARFCN >>E-PUCH Timeslot Information 1.28Mcps  >>>Time Slot LCR M >>>Midamble Shift LCR >>>Codes LCR  Add to E-AGCH Resource Pool 1.28Mcps  >E-AGCH Information	0 <maxfr cell="" equencyin=""> 0<maxno lotslcr="" ofepuchs="">  1<maxno ofepuchc<="" td=""><td>9.2.3.58 9.2.3.62 9.2.3.24A 9.2.3.7A</td><td>only See note 2</td><td>-</td><td>reject</td></maxno></maxno></maxfr>	9.2.3.58 9.2.3.62 9.2.3.24A 9.2.3.7A	only See note 2	-	reject
E-PUCH Information 1.28Mcps  >LTGI Presence M  >SNPL Reporting Type M  >E-PUCH Timeslot information 1.28Mcps per UARFCN  >>E-PUCH Timeslot Information 1.28Mcps   >>>Time Slot LCR M  >>>Midamble Shift LCR  >>>Codes LCR  Add to E-AGCH Resource Pool 1.28Mcps  >E-AGCH Information	0 <maxfr cell="" equencyin=""> 0<maxno lotslcr="" ofepuchs="">  1<maxno ofepuchc<="" td=""><td>9.2.3.58 9.2.3.62 9.2.3.24A 9.2.3.7A</td><td>only See note 2</td><td>-</td><td>reject</td></maxno></maxno></maxfr>	9.2.3.58 9.2.3.62 9.2.3.24A 9.2.3.7A	only See note 2	-	reject
1.28Mcps   SLTGI Presence   M	0 <maxfr cell="" equencyin=""> 0<maxno lotslcr="" ofepuchs="">  1<maxno ofepuchc<="" td=""><td>9.2.3.62 9.2.3.24A 9.2.3.7A</td><td>only See note 2</td><td>-</td><td>reject</td></maxno></maxno></maxfr>	9.2.3.62 9.2.3.24A 9.2.3.7A	only See note 2	-	reject
>SNPL Reporting Type  >E-PUCH Timeslot information 1.28Mcps per UARFCN  >>E-PUCH Timeslot Information 1.28Mcps  >>>Time Slot LCR  >>>M  >>>Midamble Shift LCR  >>>Codes LCR  M  >>>TDD Channelisation Code  >>UARFCN  Add to E-AGCH Resource Pool 1.28Mcps  >E-AGCH Information	equencyin Cell> 0 <maxno lotslcr="" ofepuchs="">  1<maxno ofepuchc<="" td=""><td>9.2.3.62 9.2.3.24A 9.2.3.7A</td><td></td><td>-</td><td></td></maxno></maxno>	9.2.3.62 9.2.3.24A 9.2.3.7A		-	
>E-PUCH Timeslot information 1.28Mcps per UARFCN  >>E-PUCH Timeslot Information 1.28Mcps  >>>Time Slot LCR  >>>M  >>>Midamble Shift LCR  >>>Codes LCR   >>>TDD Channelisation Code  >>UARFCN  Add to E-AGCH Resource Pool 1.28Mcps  >E-AGCH Information	equencyin Cell> 0 <maxno lotslcr="" ofepuchs="">  1<maxno ofepuchc<="" td=""><td>9.2.3.24A 9.2.3.7A</td><td></td><td>- - -</td><td></td></maxno></maxno>	9.2.3.24A 9.2.3.7A		- - -	
>E-PUCH Timeslot information 1.28Mcps per UARFCN  >>E-PUCH Timeslot Information 1.28Mcps  >>>Time Slot LCR  >>>M  >>>Midamble Shift LCR  >>>Codes LCR   >>>TDD Channelisation Code  >>UARFCN  Add to E-AGCH Resource Pool 1.28Mcps  >E-AGCH Information	equencyin Cell> 0 <maxno lotslcr="" ofepuchs="">  1<maxno ofepuchc<="" td=""><td>9.2.3.7A</td><td></td><td>- - -</td><td></td></maxno></maxno>	9.2.3.7A		- - -	
information 1.28Mcps per UARFCN  >>E-PUCH Timeslot Information 1.28Mcps  >>>Time Slot LCR  >>>M  >>>Midamble Shift LCR  >>>Codes LCR   >>>>TDD Channelisation Code  >>UARFCN  Add to E-AGCH Resource Pool 1.28Mcps  >E-AGCH Information	Cell> 0 <maxno lotslcr="" ofepuchs="">  1<maxno ofepuchc<="" td=""><td>9.2.3.7A</td><td>below</td><td>- - -</td><td></td></maxno></maxno>	9.2.3.7A	below	- - -	
Information 1.28Mcps  >>>Time Slot LCR	ofEPUCHs lotsLCR> 1 <maxno ofEPUCHc</maxno 	9.2.3.7A		_ 	
>>>Midamble Shift LCR >>>Codes LCR  >>>TDD M Channelisation Code >>UARFCN  Add to E-AGCH Resource Pool 1.28Mcps >E-AGCH Information	ofEPUCHc	9.2.3.7A		_	
LCR  >>>Codes LCR   >>>>TDD M Channelisation Code  >>UARFCN  Add to E-AGCH Resource Pool 1.28Mcps >E-AGCH Information	ofEPUCHc			_	
>>>>TDD	ofEPUCHc	0.2.2.10			
Channelisation Code  >>UARFCN  O  Add to E-AGCH Resource Pool 1.28Mcps >E-AGCH Information		0 2 2 10		-	
>>UARFCN O  Add to E-AGCH Resource Pool 1.28Mcps >E-AGCH Information		9.2.3.19		_	
Add to E-AGCH Resource Pool 1.28Mcps >E-AGCH Information		9.2.1.65	Corresponds to	YES	ignore
Pool 1.28Mcps >E-AGCH Information			Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.		3
	01		1.28Mcps TDD only	GLOBAL	reject
	1 <maxno ofEAG CHs&gt;</maxno 			_	
>>E-AGCH ID TDD M		9.2.3.51		_	
>>Time Slot LCR M		9.2.3.24A		_	
>>Midamble Shift LCR M		9.2.3.7A			
>>First TDD M				_	
Channelisation Code		TDD Channelisat ion Code 9.2.3.19		_	
>>Second TDD M		TDD		_	
Channelisation Code		Channelisat ion Code 9.2.3.19			
>>Maximum E-AGCH M Power		DL Power 9.2.1.21		_	
>>UARFCN O		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using	YES	ignore
			multiple frequencies.	01.05.:	<u> </u>
Modify E-AGCH Resource Pool 1.28Mcps	01		1.28Mcps TDD only	GLOBAL	reject
>E-AGCH Information 1.28Mcps				_	
>>E-AGCH ID TDD M	1 <maxno ofEAG CHs&gt;</maxno 				
>>Time Slot LCR O	ofEAG	9.2.3.51		_	
>>Midamble Shift LCR O	ofEAG	9.2.3.51 9.2.3.24A		_ _	

>>First TDD	0		TDD		_	
Channelisation Code			Channelisat			
			ion Code			
			9.2.3.19			
>>Second TDD	0	1	TDD		_	
Channelisation Code			Channelisat			
Chamensation code			ion Code			
M : 5 400H			9.2.3.19			
>>Maximum E-AGCH	0		DL Power		_	
Power			9.2.1.21			
>>UARFCN	0		9.2.1.65	Corresponds to	YES	ignore
				Nt [15]		
				Mandatory for		
				1.28Mcps TDD		
				when using		
				multiple		
				frequencies.		
Add to E-HICH Resource		01		1.28Mcps TDD	GLOBAL	reject
Pool 1.28Mcps		01		only	SLODAL	reject
>E-HICH Information		1		Offity		
		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
1.28Mcps		ofEHICHs				
		>				
>>E-HICH ID TDD	M		9.2.3.51a	If the Extended	_	
				E-HICH ID TDD		
				IE is included in		
				the <i>E-HICH</i>		
				Information		
				1.28Mcps IE,		
				the <i>E-HICH ID</i>		
				TDD IE shall be		
>>E-HICH Type	M		9.2.3.68	ignored.	_	
>>E-niCn Type >>TDD Channelisation		<del>                                     </del>			_	
	M		9.2.3.19		_	
Code						
>>Time Slot LCR	M		9.2.3.24A		_	
>>Midamble Shift LCR	M		9.2.3.7A		_	
>>Maximum E-HICH	M		DL Power		_	
Power			9.2.1.21			
>>Extended E-HICH ID	0		9.2.3.51b	Applicable to	YES	ignore
TDD			3.2.0.3.0	1.28Mcps TDD	0	.50.0
				only, the		
				Extended E-		
				HICH ID TDD		
				IE shall be used		
				if the E-HICH		
				identity has a		
				value larger		
				than 31.		
>>UARFCN	0		9.2.1.65	Corresponds to	YES	ignore
				Nt[15]		
				Mandatory for		
				1.28Mcps TDD		
				when using		
				multiple		
				frequencies.		
Modify E-HICH Resource		01		1.28Mcps TDD	GLOBAL	reject
Pool 1.28Mcps		]		only	0200,12	. 0,000
>E-HICH Information		1 <maxno< td=""><td></td><td>Jiny</td><td></td><td></td></maxno<>		Jiny		
1.28Mcps		ofEHICHs				
1.Zumopa						
	1	>	1	<u> </u>	l	

	T	1	T	T	1	
>>E-HICH ID TDD	M		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information 1.28Mcps IE, the E-HICH ID TDD IE shall be	-	
				ignored.		
>>E-HICH Type	0		9.2.3.68		_	
>>TDD Channelisation Code	0		9.2.3.19		_	
>>Time Slot LCR	0		9.2.3.24A		_	
>>Midamble Shift LCR	0		9.2.3.7A		_	
>>Maximum E-HICH Power	0		DL Power 9.2.1.21		_	
>>Extended E-HICH ID TDD	0		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore
>>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Mandatory for 1.28Mcps TDD when using multiple frequencies.	YES	ignore
Delete from E-HICH Resource Pool 1.28Mcps		0 <maxno ofEHICHs &gt;</maxno 		1.28Mcps TDD only	GLOBAL	reject
>E-HICH ID TDD	M		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the Delete from E-HICH Resource Pool 1.28Mcps IE, the E-HICH ID TDD IE shall be ignored.	_	
>Extended E-HICH ID TDD	О		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore

SYNC_UL Partition Information		01		Applicable to 1.28Mcps TDD to indicate the SYNC_UL partition information for the Primary Frequency. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>E-RUCCH SYNC_UL codes bitmap	M		BITSTRING (8)	Each bit indicates availability of a SYNC_UL code, where the SYNC_UL codes are numbered "code 0" to "code 7". The value 1 of a bit indicates that the corresponding SYNC_UL code can be used. The value 0 of a bit indicates that the corresponding SYNC_UL code can be used. The value 0 of a bit indicates that the corresponding SYNC_UL code can not be used.		
Maximum Target Received Total Wide Band Power LCR	0		9.2.3.69	1.28Mcps TDD only	YES	reject
HS-DSCH Common System Information LCR	0		9.2.3.72	1.28Mcps TDD only	YES	reject
Common MAC Flows To Delete LCR	0		9.2.3.78	1.28Mcps TDD only	YES	reject
HS-DSCH Paging System Information LCR	0		9.2.3.73	1.28Mcps TDD only	YES	reject
Paging MAC Flows to Delete LCR	0		9.2.3.85	1.28Mcps TDD only	YES	reject
Common E-DCH System Information LCR	0		9.2.3.79	1.28Mcps TDD only	YES	reject
Common UL MAC Flows to Delete LCR	0		Common MAC Flows To Delete LCR 9.2.3.78	1.28Mcps TDD only	YES	reject
Common E-DCH MAC-d Flows to Delete LCR	0		9.2.3.86	1.28Mcps TDD only	YES	reject
Enhanced UE DRX Information LCR	0		9.2.3.82	1.28Mcps TDD only	YES	reject

- Note 1: This information element is a simplified representation of the ASN.1. The choice is in reality performed through the use of ProtocolIE-Single-Container within the ASN.1.
- Note 2: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxFrequencyinCell are represented by separate ASN.1 structures with different criticalities.
- Note 3: This information element is a simplified representation of the ASN.1. Repetitions 1 to 32 and repetitions 33 to *maxnoofHSSCCHs* are represented by separate ASN.1 structures.

Range Bound	Explanation
maxnoofPDSCHSets	Maximum number of PDSCH Sets in a cell.
maxnoofPDSCHs	Maximum number of PDSCH in a cell.
maxnoofPUSCHSets	Maximum number of PUSCH Sets in a cell.
maxnoofPUSCHs	Maximum number of PUSCH in a cell.
maxnoofDLts	Maximum number of Downlink time slots in a cell for 3.84Mcps TDD.
maxnoofDLtsLCR	Maximum number of Downlink time slots in a cell for 1.28Mcps TDD.
maxnoofULts	Maximum number of Uplink time slots in a cell for 3.84Mcps TDD.
maxnoofULtsLCR	Maximum number of Uplink time slots in a cell for 1.28Mcps TDD
maxnoofHSSCCHs	Maximum number of HS-SCCHs in a Cell
maxnoofHSPDSCHs	Maximum number of HS-PDSCHs in one time slot of a Cell for 1.28Mcps TDD and 3.84Mcps TDD
maxnoofHSPDSCHs768	Maximum number of HS-PDSCHs in one time slot of a Cell for 7.68Mcps TDD
maxnoofEAGCHs	Maximum number of E-AGCHs in a Cell
maxnoofEPUCHslots	Maximum number of E-PUCH time slots in a Cell for 3.84Mcps TDD and 7.68Mcps TDD
maxnoofEHICHs	Maximum number of E-HICHs in a Cell
maxnoofEPUCHslotsLCR	Maximum number of E-PUCH time slots in a Carrier for 1.28Mcps TDD
maxnoofEPUCHcodes	Maximum number of E-PUCH codes in one time slot for 1.28Mcps TDD
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

## 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	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore
E-HICH Time Offset	0		9.2.3.59	Applicable to 3.84Mcps and 7.68 Mcps TDD only	YES	reject
E-HICH Time Offset LCR per UARFCN		0 < maxFrequ encyinCell >		1.28Mcps TDD only. See note 1 below	EACH	reject
>E-HICH Time Offset LCR	М		9.2.3.59a		_	
>UARFCN	0		9.2.1.65	Corresponds to Nt [15]. Mandatory for 1.28Mcps TDD when using multiple frequencies.	_	
HS-DSCH Common System Information Response	0		9.2.2.77		YES	ignore
HS-DSCH Paging System Information Response	0		9.2.2.78		YES	ignore
Common E-DCH System Information Response	0		9.2.2.104	FDD only	YES	Ignore
HS-DSCH Common System Information Response LCR	0		9.2.3.74	1.28Mcps TDD only	YES	ignore
HS-DSCH Paging System Information Response LCR	0		9.2.3.75	1.28Mcps TDD only	YES	ignore
Common E-DCH System Information Response LCR	0		9.2.3.80	1.28Mcps TDD only	YES	Ignore

Note 1 This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxFrequencyinCell are represented by separate ASN.1 structures with different criticalities.

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

# 9.1.64 PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
CHOICE Cause Level	М				YES	ignore
>General						
>>Cause	М		9.2.1.6		_	
>Set Specific				TDD Only		
>>Unsuccessful DL Shared Channel Set		0 <maxno ofPDSCH Sets&gt;</maxno 			EACH	ignore
>>>PDSCH Set ID	М	0010>	9.2.3.13		_	
>>>Cause	М		9.2.1.6		_	
>>Unsuccessful UL Shared Channel Set		0 <maxno ofPUSCH Sets&gt;</maxno 			EACH	ignore
>>>PUSCH Set ID	М		9.2.3.13		_	
>>>Cause	M		9.2.1.6		_	
>Extension Cause Level						
>>UARFCN Specific		1		Applicable to 1.28Mcps TDD only when using multiple frequencies	YES	ignore
>>>Unsuccessful UARFCN		0 <maxfreq uencyinCe II&gt;</maxfreq 			EACH	ignore
>>>UARFCN	M		9.2.1.65	Corresponds to Nt [15] Used to indicate the carrier on which HSDPA or E- DCH related resources configuration failure occurs.	-	
>>>>Cause	М		9.2.1.6		_	
>>>HS-Cause	0		9.2.1.6	Used to indicate the cause of HSDPA configuration. failure	YES	ignore
>>>E-Cause	0		9.2.1.6	Used to indicate the cause of E-DCH related configuration failure.	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
maxnoofPDSCHSets	Maximum number of PDSCH Sets in a cell
maxnoofPUSCHSets	Maximum number of PUSCH Sets in a cell
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

# 9.1.65 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		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	The reserved value "All CRNCCC" shall not be used.	_	
>>>Node B Communication Context						
>>>>Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	-	
>Communication Control Port						
>>Communication Control Port Information		1 <maxc CPinNode B&gt;</maxc 			EACH	reject
>>>Communication Control Port ID	М		9.2.1.15		_	
>Node B			NULL			

Range Bound	Explanation
maxCommunicationContext	Maximum number of Communication Contexts that can exist in the Node B
maxCCPinNode B	Maximum number of Communication Control Ports that can exist in the Node B

## 9.1.66 RESET RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

# 9.1.67 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
Node B Communication Context ID	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 and 7.68Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.4P	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD and 7.68Mcps TDD.	YES	ignore
Primary CCPCH RSCP	0		9.2.3.11A		YES	ignore
Primary CCPCH RSCP Delta	0		9.2.3.11B		YES	ignore

## 9.1.68 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and	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		_	
CRNC Communication Context ID	М		9.2.1.18		YES	ignore
RL Information		0 <maxno ofRLs&gt;</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	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Officiality
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	М				YES	reject
>Cell						
>>C-ID	M		9.2.1.9		_	
Information Type	M		9.2.1.36D		YES	reject
Information Report Characteristics	М		9.2.1.36B		YES	reject

## 9.1.70 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
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	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	Ţ.
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE Information Exchange Object Type	M				YES	ignore
>Cell						
>>Requested Data Value Information	M		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	M		9.2.1.6		YES	ignore

# 9.1.75 CELL SYNCHRONISATION INITIATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	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	М		9.2.1.53A		_	
>UARFCN	М		9.2.1.65		_	
>SYNC_DL Code ID	М		9.2.3.18B		_	
>DwPCH Power	М		9.2.3.5B		_	
SYNC_DL Code Measurement Initiation Information LCR		01		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Measurement ID	M		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	M		9.2.3.7B		YES	reject
Number Of Repetitions Per Cycle Period	М		9.2.3.7C		YES	reject
Cell Sync Burst Transmission Reconfiguration Information		0 <maxno ofCellSync Bursts&gt;</maxno 		Applicable to 3.84Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N		_	
>Sync Frame Number To Transmit	М		Sync Frame Number 9.2.3.18C		_	
>Cell Sync Burst Code	0		9.2.3.4G		_	
>Cell Sync Burst Code Shift	0		9.2.3.4H		_	
>DL Transmission Power	0		DL Power 9.2.1.21		_	
Cell Sync Burst Measurement Reconfiguration Information		01		Applicable to 3.84Mcps TDD only	YES	reject
>Cell Sync Burst Measurement Information		1 <maxno ofCellSync Bursts&gt;</maxno 			GLOBAL	reject
>>Sync Frame Number To Receive	М		Sync Frame Number 9.2.3.18C		_	
>>Cell Sync Burst Information		1 <maxno ofreceptio nsperSync Frame&gt;</maxno 			_	
>>>CSB Measurement ID	М		9.2.3.41		_	
>>>Cell Sync Burst Code	М		9.2.3.4G		_	
>>>Cell Sync Burst Code Shift	М		9.2.3.4H		_	
>Synchronisation Report Type	0		9.2.3.18E		YES	reject
>Synchronisation Report Characteristics	0		9.2.3.18D		YES	reject
Number Of Subcycles Per Cycle Period	0		9.2.3.7D	Applicable to 1.28Mcps TDD only	YES	reject

SYNC_DL Code Transmission Reconfiguration Information LCR		0 <maxno ofSyncFra mesLCR&gt;</maxno 		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>CSB Transmission ID	M		9.2.3.4N		_	
>Sync Frame Number For Transmission	М		Sync Frame Number 9.2.3.18C		_	
>UARFCN	M		9.2.1.65		_	
>SYNC_DL Code ID	0		9.2.3.18B		_	
>DwPCH Power	0		9.2.3.5B		_	
SYNC_DL Code Measurement Reconfiguration Information LCR		01		Applicable to 1.28Mcps TDD only	YES	reject
>SYNC_DL Code Measurement Information LCR		1 <maxno ofSyncDL CodesLCR &gt;</maxno 			_	
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C		_	
>>Sync_DLCode Information LCR		1 <maxno ofreceptio nsperSync FrameLCR</maxno 			_	
>>>CSB Measurement	М		9.2.3.41		-	
>>>SYNC_DL Code ID	M		9.2.3.18B		_	
>>>UARFCN	М		9.2.1.65		_	
>>>Propagation Delay Compensation	0		Timing Adjustment Value LCR 9.2.3.22b		-	
>Synchronisation Report Type	0		9.2.3.18E		YES	reject
>Synchronisation Report Characteristics	0		9.2.3.18D		YES	reject

Range Bound	Explanation
maxnoofCellSyncBursts	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of Sync Frames per subcycle for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD
maxnoofSyncDLCodesLCR	Maximum number of SYNC_DL Codes for 1.28Mcps TDD

# 9.1.79 CELL SYNCHRONISATION RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	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 IlinNode B&gt;</maxce 			GLOBAL	ignore
>C-ID	М		9.2.1.9		YES	ignore
>CHOICE Synchronisation Report Type	0				YES	ignore
>>Initial Phase or Steady- State Phase						
>>>Cell Sync Burst Measured Information		0 <maxno ofCellSync Bursts&gt;</maxno 		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	_	
>>>SFN	М		9.2.1.53A		_	
>>>>Cell Sync Burst Information		1 <maxno ofreceptio nsperSync Frame&gt;</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	М		9.2.3.4K		_	
>>>> Cell Sync Burst Not Available			NULL			
>>>Accumulated Clock Update	0		Timing Adjustment Value 9.2.3.22a		YES	ignore
>>>SYNC_DL Codes Measured Information		0 <maxno ofSyncFra mesLCR&gt;</maxno 		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>>SFN	М		9.2.1.53A		_	
>>>SYNC_DL Code Information		1 <maxno ofreceptio nsperSync FrameLCR</maxno 			_	

		>			
>>>>CHOICE SYNC_DL Code Availability Indicator	M			ı	
>>>>SYNC_DL Code Available					
>>>>SYNC_ DL Code ID Timing	М		Cell Sync Burst Timing LCR 9.2.3.4La	-	
>>>>SYNC_ DL Code ID SIR	M		Cell Sync Burst SIR 9.2.3.4K	I	
>>>>SYNC_DL Code Not Available			NULL		
>>Late-Entrant Cell			NULL		
>>Frequency Acquisition			NULL		

Range Bound	Explanation
maxCellinNode B	Maximum number of Cells in a Node B
maxnoofCellSyncBursts	Maximum number of cell synchronisation bursts per cycle for 3.84Mcps TDD
maxnoofreceptionsperSyncFrame	Maximum number of cell synchronisation burst receptions per Sync Frame for 3.84Mcps TDD
maxnoofSyncFramesLCR	Maximum number of SYNC Frames per measurement reporting period for 1.28Mcps TDD
maxnoofreceptionsperSyncFrameLCR	Maximum number of SYNC_DL Code ID receptions per Sync Frame for 1.28Mcps TDD

# 9.1.82 CELL SYNCHRONISATION TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	0		9.2.3.4N		YES	ignore
CSB Measurement ID	0		9.2.3.41		YES	ignore

# 9.1.83 CELL SYNCHRONISATION FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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	Semantics	Criticality	Assigned
_			and	Description	_	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		_	
Cell Adjustment		1 <maxce< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxce<>			EACH	ignore
Information		llinNode B>				
>C-ID	M		9.2.1.9		-	
>Frame Adjustment Value	0		9.2.3.5C		1	
>Timing Adjustment Value	0		9.2.3.22a	Applicable to 3.84Mcps TDD only	I	
>DL Transmission Power	0		9.2.1.21	Applicable to 3.84Mcps TDD only	-	
>SFN	0		9.2.1.53A		-	
>DwPCH Power	0		9.2.3.5B	Applicable to 1.28Mcps TDD only	YES	ignore
>Timing Adjustment Value LCR	0		9.2.3.22b	Applicable to 1.28Mcps TDD only	YES	ignore

Range Bound	Explanation		
maxCellinNode B	Maximum number of Cells in a Node B		

# 9.1.85 CELL SYNCHRONISATION ADJUSTMENT RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
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

# 9.1.86 CELL SYNCHRONISATION ADJUSTMENT FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
CHOICE Cause Level	М				YES	ignore
>General						
>>Cause	М		9.2.1.6		_	
>Cell Specific						
>>Unsuccessful Cell Information Response		1 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>>>C-ID	М		9.2.1.9		_	
>>>Cause	М		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation			
maxCellinNode B	Maximum number of Cells in a Node B			

## 9.1.87 BEARER REARRANGEMENT INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
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
Signalling Bearer Request Indicator	0		9.2.1.55A		YES	ignore
DCHs To Re-arrange		0 <maxno ofDCHs&gt;</maxno 			GLOBAL	ignore
>DCH ID	М		9.2.1.20		_	
DSCHs To Re-arrange		0 <maxno ofDSCHs&gt;</maxno 		TDD only	GLOBAL	ignore
>DSCH ID	М		9.2.3.5a		_	
USCHs To Re-arrange		0 <maxno ofUSCHs&gt;</maxno 		TDD only	GLOBAL	ignore
>USCH ID	М		9.2.3.27		_	
HS-DSCHs MAC-d Flow To Re-arrange		0 <maxno ofMACdFI ows&gt;</maxno 			GLOBAL	ignore
>HS-DSCH MAC-d Flow ID	М		9.2.1.311		_	
E-DCHs MAC-d Flow To Rearrange		0 <maxno ofEDCHM ACdFlows &gt;</maxno 			GLOBAL	ignore
>E-DCH MAC-d Flow ID	M		9.2.1.29ad		ı	

Range bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE
maxnoofDSCHs	Maximum number of DSCHs for a UE
maxnoofUSCHs	Maximum number of USCHs for a UE
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

## 9.1.88 RADIO LINK ACTIVATION COMMAND

## 9.1.88.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Node B Communication Context ID	М		9.2.1.48		YES	ignore
Delayed Activation Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>Delayed Activation Update	М		9.2.1.24D		_	

Range Bound	Explanation			
maxnoofRLs	Maximum number of RLs for one UE			

## 9.1.88.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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		YES	ignore
Delayed Activation Information		1 <maxno ofRLs&gt;</maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>Delayed Activation Update	М		9.2.1.24D		_	

Range Bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE

## 9.1.89 RADIO LINK PARAMETER UPDATE INDICATION

## 9.1.89.1 FDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45	_	_	_
Message Type	М		9.2.1.46		YES	ignore
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
HS-DSCH FDD Update Information	0		9.2.2.18Ea		YES	ignore
E-DCH FDD Update Information	0		9.2.2.13DA		YES	ignore
Additional HS Cell Information RL Param Upd		0 <maxno ofHSDSC H-1&gt;</maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.53		_	
>HS-DSCH FDD Secondary Serving Update Information	М		9.2.2.18Eaa		_	

Range Bound	Explanation
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE

## 9.1.89.2 TDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
HS-DSCH TDD Update Information	0		9.2.3.5GA		YES	ignore

## 9.1.90 MBMS NOTIFICATION UPDATE COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
Common Physical Channel ID	М		9.2.1.13		YES	ignore
Modification Period	0		9.2.1.47a	This IE shall be present in the very first message	YES	ignore
MICH CFN	M		9.2.1.46a		YES	ignore
NI Information		1 <maxno ofNIs&gt;</maxno 			GLOBAL	ignore
>NI	M		9.2.1.47F		_	

Range Bound	Explanation
maxNoofNIs	Maximum number of NIs

# 9.1.91 UE STATUS UPDATE COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Cell E-RNTI Status Information		1 <maxce IlinNode B&gt;</maxce 			EACH	ignore
>C-ID	М		9.2.1.9		_	
> Vacant E-RNTI		1 <maxer ntiToRelea se &gt;</maxer 			EACH	ignore
>>E-RNTI	М		9.2.1.75			

Range Bound	Explanation
maxCellinNode B	Maximum number of Cells in a Node B
maxErntiToRelease	Maximum number of E-RNTI to release per cell

#### 9.2 Information Element Functional Definition and Contents

#### 9.2.0 General

Subclause 9.2 presents the NBAP IE definitions in tabular format. The corresponding ASN.1 definition is presented in Subclause 9.3. In case there is a contradiction between the tabular format in Subclause 9.2 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

When specifying information elements which are to be represented by bitstrings, if not otherwise specifically stated in the semantics description of the concerned IE or elsewhere, the following principle applies with regards to the ordering of bits:

- The first bit (leftmost bit) contains the most significant bit (MSB);
- The last bit (rightmost bit) contains the least significant bit (LSB);
- When importing bitstrings from other specifications, the first bit of the bitstring contains the first bit of the concerned information;

## 9.2.1 Common parameters

#### 9.2.1.1 Add/Delete Indicator

The add/delete indicator shall notify the CRNC whether the associated resource has been added to or removed from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Add/Delete Indicator			ENUMERATED (	
			Add,	
			Delete)	

#### 9.2.1.1A Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of Node B internal resources. See Annex A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Level	M		INTEGER (015)	This IE indicates the priority of the request.  Usage: Value "0" means "Spare"; It shall be treated as a logical error if received. Values between "1" and "14" are ordered in decreasing order of priority, "1" being the highest and "14" the lowest. Value "15" means "No Priority".
Pre-emption Capability	M		ENUMERATED ( shall not trigger pre- emption, may trigger pre- emption)	
Pre-emption Vulnerability	M		ENUMERATED ( not pre-emtable, pre-emptable)	

#### 9.2.1.1B Alternative Format Reporting Indicator

This IE indicates if Node B may report a measurement using an alternative format.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Alternative Format Reporting			ENUMERATED	
Indicator			(Alternative format is	
			allowed,)	

#### 9.2.1.2 Availability Status

The availability status is used to indicate more detailed information of the availability of the resource. In accordance with ref. [3], following values are defined. If the value of this IE is "empty", this implies that none of the status conditions described in ref. [3] are present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Availability Status			ENUMERATED ( empty, in test, failed, power off, off line, off duty, dependency, degraded, not installed, log full,)	

#### 9.2.1.3 BCCH Modification Time

Indicates the time after which the new system information shall be applied on BCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BCCH Modification Time			INTEGER (0511)	All SFN values in which MIB may be mapped are allowed. The tabular description is presented in [18].

#### 9.2.1.4 Binding ID

The Binding ID is the identifier of a user data stream.

In case of transport bearer establishment with ALCAP [2][31], this IE contains the identifier that is allocated at the Node B and that is unique for each transport bearer under establishment to/from the Node B.

If the Transport Layer Address contains an IP address [29], this IE contains the UDP port [30] intended to be used for the user plane transport.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Binding ID			OCTET STRING (14,)	If the Binding ID includes an UDP port, the UDP port is included in octets 1 and 2. The first octet of the UDP port field shall be included in the first
				octet of the Binding ID.

#### 9.2.1.4A BLER

Void.

#### 9.2.1.5 Blocking Priority Indicator

The Blocking priority indicator shall indicate the immediacy with which a resource should be blocked from use. The following priority classes shall be supported in the Blocking priority indicator.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Blocking Priority Indicator			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.

#### 9.2.1.5A Burst Mode Parameters

The Burst Mode Parameters IE provides information to be applied for IPDL burst mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Burst Start	M		INTEGER (015)	See [10] and [21]
Burst Length	M		INTEGER (1025)	See [10] and [21]
Burst Freq	М		INTEGER (116)	See [10] and [21]

#### 9.2.1.5B Broadcast Common Transport Bearer Indication

The *Broadcast Common Transport Bearer Indication* IE is used by the Node B to inform the CRNC that the transport bearer of the existing Common Transport Channel which is indicated by the *Common Transport Channel ID* IE and *C-ID* IE, shall be used instead of establishing a new transport bearer. If there are more than one Common Transport Channels sharing the same transport bearer, Node B may include any one of these Common Transport Channels together with its corresponding C-ID in *Broadcast Common Transport Bearer Indication* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	М		9.2.1.14	
C-ID	М		9.2.1.9	

#### 9.2.1.5C Broadcast Reference

The *Broadcast Reference* IE is a unique identifier within the CRNC identifying the intended usage of a requested Common Transport Channel (e.g. the *Broadcast Reference* IE may identify a particular MBMS session).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Broadcast Reference			BIT STRING (SIZE(24))	
			(0124(27))	

## 9.2.1.6 Cause

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Cause Group	M		71	
>Radio Network Layer				
		Range	ENUMERATED ( 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,	Semantics Description
			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,	
			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 type of Bearer Re- arrangement not supported, Signalling Bearer Re- arrangement not supported, Bearer Re-arrangement needed, Delayed Activation not Supported, RL Timing Adjustment not supported, MICH not supported, F-DPCH Not Supported, Modification Period not available, PLCCH not supported, Continuous Packet Connectivity DTX-DRX operation not available, Continuous Packet Connectivity UE DTX Cycle not available, MIMO not available, E-DCH MAC-d PDU Size Format not available, SixtyfourQAM DL and MIMO Combined not available, Multi Cell operation not	
T		available)	
>Transport Layer	N.4	ENHALDATED /	
>>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 concerned cell(s) do not support Cell Synchronisation.
Combining not supported	The Node B does not support RL combining for the concerned cells.
Combining Resources Not Available	The value of the received <i>Diversity Control Field</i> IE was set to "Must", but the Node B cannot perform the requested combining.
CM not supported	The concerned cell(s) do not support Compressed Mode.
CM not supported Common Transport Channel Type not	The concerned cell(s) do not support the RACH and/or FACH Common
supported	Transport Channel Type.
Continuous Packet Connectivity	CPC resources for DTX-DRX operation not available in the concerned
DTX-DRX operation not available	cell(s).
Continuous Packet Connectivity UE	CPC resources for the UE DTX Cycle not available in the concerned
DTX Cycle not available	cell(s).
Dedicated Transport Channel Type not	The concerned cell(s) do not support the Dedicated Transport Channel
supported	Type.
Delayed Activation not Supported	The concerned cell(s) do not support delayed activation of RLs.
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.
E-DCH MAC-d PDU Size Format not	The selected E-DCH MAC-d PDU Size Format is not available in the
available	concerned cell(s).
Frequency Acquisition not supported	The concerned cell(s) do not support Frequency Acquisition.
F-DPCH not supported	The concerned cell(s) do not support the Fractional DPCH
Information Provision not supported	The requested information provision is not supported for the concerned
for the object	object types.
Information temporarily not available Invalid CM Settings	The requested information can temporarily not be provided.  The concerned cell(s) consider the requested Compressed Mode settings
mvand CW 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
- Familia de la companya de la compa	applied.
Measurement not Supported For The	At least one of the concerned cell(s) does not support the requested
Object	measurement on the concerned object type.
Measurement Temporarily not	The Node B can temporarily not provide the requested measurement
Available	value.
MICH not supported	The concerned cell does not support MICH.
MIMO not available	MIMO resources not available in the concerned cell(s).
Modificaton Period not available	The Node B does not have modification period available.
Multi Cell operation not available	Multi Cell operation resources not available in the concerned cell(s)
Node B resources unavailable	The Node B does not have sufficient resources available.
Number of DL codes not supported	The concerned cell(s) do not support the requested number of DL codes.
Number of UL codes not supported	The concerned cell(s) do not support the requested number of UL codes.
Power Level not Supported	A DL power level was requested which the concerned cell(s) do not support.
Power Balancing status not compatible	The power balancing status in the SRNC is not compatible with that of the Node B.
PLCCH not supported	The concerned cell does not support PLCCH.
Priority transport channel established	The CRNC cannot perform the requested blocking since a transport
	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.
supported	
SixtyfourQAM DL and MIMO	SixtyfourQAM DL and MIMO Combined not available in the concerned
Combined not available	cell(s).
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.]

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Common Transport Channel Setup
- Common Transport Channel Deletion
- [FDD Common Transport Channel Reconfiguration]

For the Common Transport Channel Setup procedure, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Common Transport Channel Deletion one.

[FDD - For the Common Transport Channel Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited if this difference is negative).]

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the "DL cost" shall be applied to the "DL or Global Capacity Credit" and the "UL Cost" shall be applied to the "UL Capacity Credit". If it is modelled as shared resources, both the "DL cost" and the "UL cost" shall be applied to the "DL or Global Capacity Credit".

[FDD - When the Common Transport Channel Setup, Deletion or Reconfiguration procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH and AICH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

[FDD - The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by a physical channel, the cost credited to or debited from the Capacity Credit for this physical channel shall be taken as N times the cost given in the consumption law, where N is the number of channelization codes.]

[TDD - When the Common Transport Channel Setup or Deletion procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law		1 <maxno ofSFs&gt;</maxno 		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost	M		INTEGER (065535)	-
>UL cost	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 Measurement Accuracy	М			
>T <sub>UTRAN-GPS</sub> Measurement Accuracy Class				
>>T <sub>UTRAN-GPS</sub> Measurement Accuracy Class	M		T <sub>UTRAN-GPS</sub> Accuracy Class 9.2.1.64C	
>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class				
>>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class	М		T <sub>UTRAN-GANSS</sub> Accuracy Class 9.2.1.98	

## 9.2.1.10 Common Measurement Object Type

Void.

## 9.2.1.11 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
Common Measurement Type	Presence	Range	Reference  ENUMERATED ( Received Total Wide Band Power,  Transmitted Carrier  Power,  Acknowledged  PRACH Preambles,  UL Timeslot ISCP,  NotUsed-1,  NotUsed-2, ,  UTRAN GPS Timing  of Cell Frames for  UE Positioning,  SFN-SFN Observed  Time Difference,  Transmitted carrier  power of all codes  not used for HS  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 HS-SCCH  E-AGCH E-RGCH or  E-HICH transmission  for Cell Portion,  UpPCH Interference,  DL Transmission  for Cell Portion,  UpPCH Required  Power for Cell  Portion, HS-DSCH  Provided Bit Rate for  Cell Portion,  UpPCH Required  Power for Cell  Portion, HS-DSCH  Provided Bit Rate for  Cell Portion, E-DCH  Provided Bit Rate for  Cell Portion,  Provided Bit Rate for  Cell Portion,  Provided Bit Rate	"UL Timeslot ISCP" is used by TDD only, "Acknowledged PRACH Preambles", 'DL Transmission Branch Load' are used by FDD only, 'UpPCH interference' is used by 1.28Mcps TDD only. This IE shall never be set to the values that are prefixed "NotUsed-". [TDD - The IE Type "Transmitted carrier power of all codes not used for HS transmission" corresponds to the measurement "Transmitted carrier power of all codes not used for HS-PDSCH [TDD - E-AGCH, E-HICH] or HS-SCCH transmission" in [5] and [23].] [FDD - The IE Type "Transmitted carrier power of all codes not used for HS transmission" corresponds to the measurement "Transmitted carrier power of all codes not used for HS-PDSCH HS-SCCH E-AGCH E-RGCH or E-HICH transmission" in [4] and [22].]

#### 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 Value			(0100)	in [22] and [23]		
>Received Total						
Wide Band Power						
>>Received Total	M		INTEGER	According to mapping	_	
Wide Band Power Value			(0621)	in [22] and [23]		
>Acknowledged				FDD Only		
PRACH Preambles	D.4		INTEGER	A coording to manning		
>>Acknowledged PRACH Preamble	M		(0240,)	According to mapping in [22]	_	
Value			(0.12 10,)	[22]		
>UL Timeslot ISCP				TDD Only		
>>UL Timeslot ISCP	M		INTEGER (0127)	According to mapping in [23]	_	
>Not used 1			NULL	This choice shall not		
				be used. Ignore if received.		
>Not Used 2			NULL	This choice shall not		
				be used. Ignore if		
>Additional Common				received. See Note 1		
Measurement Values				See Note 1		
>>UTRAN GPS						
Timing Of Cell Frames for UE						
Positioning						
>>>T <sub>UTRAN-GPS</sub>	М		9.2.1.64A		YES	ignore
Measurement						
Value Information >>SFN-SFN						
Observed Time						
Difference	NA.		0.04.505		VEO	
>>>SFN-SFN Measurement	M		9.2.1.53E		YES	ignore
Value Information						
>>Transmitted						
Carrier Power Of All Codes Not Used						
For						
HSTransmission			W.TEGED		\/F0	
>>>Transmitted Carrier Power Of	M		INTEGER (0100)	According to mapping in [22], measurement	YES	ignore
All Codes Not			(0100)	"Transmitted Carrier		
Used For				Power Of All Codes		
HSTransmission				Not Used For HS-		
Value				PDSCH, HS-SCCH, E-AGCH, E-RGCH or		
				E-HICHTransmission"		
				and mapping in [23],		
				measurement "Transmitted Carrier		
				Power Of All Codes		
				Not Used For HS-		
				PDSCH Or HS-SCCH Transmission"		
>>HS-DSCH				. ransmission		
Required Power >>>HS-DSCH	M		9.2.1.31lc		YES	ignoro
Required Power	IVI		J.Z. 1.J 110		163	ignore

Value Information						
>>HS-DSCH						
Provided Bit Rate						
>>>HS-DSCH	М		9.2.1.31lb		YES	ignore
	IVI		3.2.1.3110		120	ignore
Provided Bit Rate						
Value Information						
>>Transmitted				FDD Only		
Carrier Power For						
Cell Portion						
>>>Transmitted		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Carrier Power		NrOfCel			OLODAL	ignore
For Cell Portion		<i>IPortion</i>				
Value		s>				
>>>Cell	M		9.2.2.1Ca		_	
Portion ID						
>>>>Transmitte	М		INTEGER	According to mapping		
	IVI				_	
d Carrier Power			(0100)	in [22]		
Value						
>>Received Total				FDD Only		
Wide Band Power				l í		
For Cell Portion						
		1	+		CLOBAL	ianarr
>>>Received		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Total Wide Band		NrOfCel				
Power For Cell		<i>IPortion</i>				
Portion Value		S>				
>>>Cell	М		9.2.2.1Ca		_	
Portion ID	'''		0.2.2.10a			
			INITEGES	A   I'   .		
>>>Received	M		INTEGER	According to mapping	_	
Total Wide			(0621)	in [22]		
Band Power						
Value						
>>Transmitted				FDD Only		
				FDD Offig		
Carrier Power Of All						
Codes Not Used						
For HS-PDSCH,						
HS-SCCH, E-						
AGCH, E-RGCH or						
E-HICH						
Transmission For						
Cell Portion						
>>>Transmitted		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Carrier Power Of		NrOfCel				J
All Codes Not		IPortion				
Used For HS-		s>				
PDSCH, HS-						
SCCH, E-AGCH,						
E-RGCH or E-						
нісн						
Transmission						
For Cell Portion						
Value	ļ <u></u>					
>>>Cell	M		9.2.2.1Ca		_	
Portion ID						
>>>Transmitte	М		INTEGER	According to mapping	_	
d Carrier Power			(0100)	in [22]		
			(0 100)	"' [44]		
Of All Codes						
Not Used For						
HS-PDSCH,						
HS-SCCH, E-						
AGCH, E-						
RGCH or E-						
HICH						
Transmission						
Value		<u> </u>			<u> </u>	
>>UpPCH				1.28Mcps TDD Only		
interference						
	N.4	1	INITECED	According to manife	YES	ianarr
>>>UpPCH	М		INTEGER	According to mapping	150	ignore
interference Value			(0127,)	in [23]		
						-

>>DL Transmission	<u> </u>		1	FDD Only		
Branch Load				FDD Offliy		
>>>Node B DL	М		INTEGER	According to mapping	YES	ignore
Transmission			(0101,)	in [22]	0	.g
Branch Load						
Values						
>>HS-DSCH				FDD Only		
Required Power						
For Cell Portion						
>>>HS-DSCH		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Required Power		NrOfCel				
For Cell Portion Information		<i>IPortion</i>				
>>>Cell	M	S>	9.2.2.1Ca			
Portion ID	IVI		9.2.2.1Ca		_	
>>>HS-DSCH	М		9.2.1.31lc		_	
Required Power	141		0.2.1.0110			
Value						
Information						
>>HS-DSCH				FDD Only		
Provided Bit Rate						
For Cell Portion						
>>>HS-DSCH		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Provided Bit		NrOfCel				
Rate For Cell		<i>IPortion</i>				
Portion		s>				
Information			0.0040			
>>>Cell	M		9.2.2.1Ca		_	
Portion ID >>>>HS-DSCH	M		9.2.1.31lb			
Provided Bit	IVI		9.2.1.3110		_	
Rate Value						
Information						
>>E-DCH Provided						
Bit Rate						
>>>E-DCH	М		9.2.1.78		YES	ignore
Provided Bit Rate						_
Value Information						
>>E-DCH Non-				FDD Only		
serving Relative						
Grant Down						
Commands			INITEGED		\/F0	
>>>E-DCH Non-	М		INTEGER	Down Commands per	YES	ignore
serving Relative Grant Down			(0100,)	second		
Commands Value						
Information						
>>Received				FDD Only		
Scheduled E-DCH				According to definition		
Power Share				in [4]		
>>>Received		1			YES	ignore
Scheduled E-						
DCH Power						
Share			INITEGES	A 21		
>>>RSEPS	M		INTEGER	According to mapping	-	
Value PTWD*			(0151)	in [22]		
>>>>RTWP*	0		INTEGER	According to mapping	_	
Value >>Received			(0621)	of RTWP in [22] FDD only		
>>Received Scheduled E-DCH				According to definition		
Power Share for				in [4]		
Cell Portion				ן ייי [ד]		
>>>Received		1 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Scheduled E-		NrOfCel			OLOD/(L	.9.1010
DCH Power		<i>IPortion</i>				
Share For Cell		S>				
Portion Value						

>>>Cell Portion ID	М		9.2.2.1Ca		-	
>>>>RSEPS for Cell Portion Value	M		INTEGER (0151)	According to mapping in [22].	-	
>>>>RTWP* for Cell Portion Value	0		INTEGER (0621)	According to mapping of RTWP in [22]	-	
>>UTRAN GANSS Timing Of Cell Frames for UE Positioning						
>>>T <sub>UTRAN-GANSS</sub> Measurement Value Information	М		9.2.1.100		YES	ignore
>>E-DCH RACH Report		1< maxnoo fCommo nEDCH s >		FDD Only		
>>> Granted E- DCH RACH Resources	M		INTEGER (0240,)	According to mapping in [25]	-	
>>> Denied E- DCH RACH Resources	M		INTEGER (0240,)	According to mapping in [25]	-	

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range Bound	Explanation
MaxNrOfCellPortions	Maximum number of Cell Portions in a cell
maxnoofCommonEDCHs	Maximum number of Common E-DCH Resource Combination for a cell

#### 9.2.1.12A Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement	M			
Availability Indicator				
>Measurement Available				
>>Common Measurement	M		9.2.1.12	
Value				
>Measurement Not Available			NULL	

#### 9.2.1.13 Common Physical Channel ID

Common Physical Channel ID is the unique identifier for one common physical channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID			INTEGER (0255)	

## 9.2.1.13A Common Physical Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	М		9.2.1.13	
Resource Operational State	М		9.2.1.52	
Availability Status	М		9.2.1.2	

# 9.2.1.14 Common Transport Channel ID

Common Transport Channel ID is the unique identifier for one common transport channel within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID			INTEGER (0255)	

### 9.2.1.14A Common Transport Channel Information Response

The *Common Transport Channel Information Response* IE provides information for Common Transport Channels that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Common Transport Channel ID	М		9.2.1.14		_	
Binding ID	0		9.2.1.4		_	
Transport Layer Address	0		9.2.1.63		-	
Broadcast Common Transport Bearer Indication	0		9.2.1.5B		YES	ignore
IP Multicast Data Bearer Indication	0		9.2.1.109		YES	ignore

# 9.2.1.14B Common Transport Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport Channel ID	М		9.2.1.14	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

## 9.2.1.15 Communication Control Port ID

A Communication Control Port corresponds to one signalling bearer between the CRNC and the Node B for the control of Node B Communication Contexts. The Node B may have multiple Communication Control Ports (one per Traffic Termination Point). The Communication Control Port is selected at creation of the Node B Communication Context. The Communication Control Port ID is the identifier of the Communication Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Communication Control Port ID			INTEGER (065535)	

## 9.2.1.16 Configuration Generation ID

The Configuration Generation ID describes the generation of the configuration of logical resources in a cell.

IE/Group Name	Presence	Range	IE Type and	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)	cadoda ino orror	_	
>Ddmode	M		ENUMERATED ( TDD, FDD, Common, )	"Common" = common to FDD and TDD.	-	
Triggering Message	0		ENUMERATED ( initiating message, successful outcome, unsuccessful outcome, outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.	-	
Procedure Criticality	0		ENUMERATED ( reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	-	
Transaction ID	0		9.2.1.62		_	
Information Element Criticality Diagnostics		0 <max nooferro rs&gt;</max 			_	
>IE Criticality	М		ENUMERATED ( reject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "ignore" shall never be used.	-	
>IE ID	М		INTEGER (065535)	The IE ID of the not understood or missing IE	-	
>Repetition Number	0		INTEGER (0255)	The Repetition Number IE gives: for a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence for a missing IE: The number of occurrences up to but not including the missing occurrence. Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.	-	

>Message Structure	0	9.2.1.45A	The Message Structure IE describes the structure where the not understood or missing IE was detected. This IE is included if the not understood IE is not the top level of the message.	YES	ignore
>Type Of Error	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 Reference	Semantics Description
CRNC Communication Context ID			INTEGER (02^20 – 1)	"2^20-1" is a reserved value indicating all the CRNC Communication Contexts that can be reached by the Communication Control Port (All CRNCCC).

## 9.2.1.18A CTFC

The CTFC is an integer number calculated in accordance with [18], subclause 14.10. Regarding the channel ordering, for all transport channels, "TrCH1" corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. "TrCH2" corresponds to the transport channel having the next lowest transport channel identity, and so on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE CTFC Format	M			
>2 bits long				
>>CTFC value	M		INTEGER (03)	
>4 bits long				
>>CTFC value	M		INTEGER (015)	
>6 bits long				
>>CTFC value	M		INTEGER (063)	
>8 bits long				
>>CTFC value	M		INTEGER (0255)	
>12 bits long				
>>CTFC value	M		INTEGER (04095)	
>16 bits long				
>>CTFC value	M		INTEGER (065535)	
>max nb bits long				
>>CTFC value	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. This is signalled using the *Min UL Channelisation Code Length* IE.]

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion
- [TDD Physical Shared Channel Reconfiguration]

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

[FDD - For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.]

[FDD - The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by either the radio links, the cost credited to or debited from the Capacity Credit shall be taken as N times the cost for one code, where N is the number of channelization codes.]

[TDD - The cost for a radio link is a sum of the costs for each DPCH. For the first DPCH assigned to any user in a cell within a timeslot, the initial cost for a DPCH in a timeslot (cost 1) and the cost for a DPCH (cost 2) shall be taken into account. For any DPCH that is not the first DPCH assigned for any user in a cell within a timeslot, only the cost for a DPCH (cost 2) shall be taken into account.]

[TDD - The cost for shared channels is the sum of the costs for each PDSCH and PUSCH assigned to a PUSCH or PDSCH set. For the first PDSCH or PUSCH assigned to any user in a cell within a timeslot, the initial cost for a PDSCH/PUSCH in a timeslot (cost 1) and the cost for a PDSCH/PUSCH (cost 2) shall be taken into account. For any PDSCH/PUSCH that is not the first PDSCH/PUSCH assigned to any user in a cell within a timeslot, only the cost for a PDSCH/PUSCH (cost 2) shall be taken into account.]

[TDD - In the case of Physical Shared Channel Reconfiguration, the sum of the consumption cost of the each PDSCH/PUSCH of the previous configuration shall be credited to the capacity credit, and the sum of the consumption cost of each PDSCH/PUSCH of the new configuration shall be subtracted from the capacity credit.]

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SF Allocation Law		1 <maxno ofSFs&gt;</maxno 		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL Cost 1	M		INTEGER (065535)	[FDD - This is the cost of a RLS.] [TDD - This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>DL Cost 2	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	Criticality	Assigned Criticality
DCH Information Response		1 <maxnoo fDCHs&gt;</maxnoo 		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		_	
>Transport Bearer Not Setup Indicator	0		9.2.2.4H	FDD only	YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCH per UE

#### 9.2.1.21 DL Power

The *DL Power* IE indicates a power level relative to the [FDD - primary CPICH power] [TDD - primary CCPCH power] configured in a cell. If Transmit Diversity is applied to a downlink physical channel, the *DL Power* IE indicates the power offset between the linear sum of the power for this downlink physical channel on all branches and the [FDD - primary CPICH power] [TDD - PCCPCH power] configured in a cell.

[FDD - If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols.] [FDD - If referred to an F-DPCH, it indicates the Reference F-DPCH TX Power.]

[TDD - If referred to a DPCH or PDSCH, it indicates the power of a spreading factor 16 code, the power for a spreading factor 1 code would be 12 dB higher. If referred to a SCCPCH, the *DL Power* IE specifies the maximum power of the SCCPCH.]

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
DL Power			INTEGER	Value = DL Power /10
			(-350150)	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 Reference	Semantics Description
Dedicated Measurement Type			ENUMERATED ( SIR, SIR Error, Transmitted Code Power, RSCP, Rx Timing Deviation, Round Trip Time,, Rx Timing Deviation LCR, Angle Of Arrival LCR, HS-SICH reception quality, Best Cell Portions, Rx Timing Deviation 7.68Mcps, Rx Timing Deviation 3.84 Mcps Extended)	"RSCP" and "HS-SICH reception quality" are used by TDD only. "Rx Timing Deviation" and "Rx Timing Deviation 3.84 Mcps Extended" are used by 3.84Mcps TDD only. "Rx Timing Deviation LCR", "Angle Of Arrival LCR" are used by 1.28Mcps TDD only. "Round Trip Time", "SIR Error" are used by FDD only. 'Best Cell Portions' is used by FDD only. "Rx Timing Deviation 7.68Mcps" is used by 7.68Mcps TDD only.

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	M		INTEGER (063)	According to mapping	_	
>SIR Error Value			(063)	in [22] and [23] FDD only		
>>SIR Error Value	M		INTEGER	According to mapping		
	IVI		(0125)	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	М		INTEGER (08191)	According to mapping in [23]	-	
>Round Trip Time			(00131)	FDD only		
>>Round Trip Time	М		INTEGER (032767)	According to mapping in [22]	-	
>Additional Dedicated Measurement Values			(032707)	See Note 1.		
>>Rx Timing Deviation Value LCR				Applicable to 1.28Mcps TDD only		
>>>Rx Timing Deviation LCR	М		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	М		INTEGER (0719)	According to mapping in [23]	_	
>>>AOA LCR Accuracy Class	М		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]	_	
>>>Failed HS- SICH LCR extension	0		INTEGER (020)	According to mapping in [23] Mandatory for LCR TDD when there are more than 20 failed HS-SICH	YES	reject
>>>>Missed HS-SICH LCR extension	0		INTEGER (020)	According to mapping in [23] Mandatory for LCR TDD when there are more than 20 missed	YES	reject

			HS-SICH		
>>>>Total HS- SICH LCR extension	0	INTEGER (020)	According to mapping in [23] Mandatory for LCR TDD when there are more than 20 total HS-SICH	YES	reject
>>Best Cell Portions			FDD only		
>>>Best Cell Portions	М	9.2.2.1Ba		YES	reject
>>Rx Timing Deviation Value 7.68Mcps			Applicable to 7.68Mcps TDD only		
>>>Rx Timing Deviation 7.68Mcps	M	INTEGER (065535)	According to mapping in [23]	YES	reject
>>Rx Timing Deviation Value 3.84Mcps Extended			Applicable to 3.84Mcps TDD only		
>>>Rx Timing Deviation 3.84Mcps Extended	M	INTEGER (032767)	According to mapping in [23]	YES	reject
>>Extended Round Trip Time			FDD only		
>>>Extended Round Trip Time Value	M	INTEGER (3276710304 1)	Continuation of intervals with step size as defined in [22].	YES	reject

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

#### 9.2.1.24A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message or not and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement 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&gt;</maxno 		
>SatID	M		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>IODE	M		BIT STRING (8)	This IE is the sequence number for the ephemeris for the particular satellite. It can be used to determine if new ephemeris is used for calculating the corrections that are provided. This eight-bit IE is incremented for each new set of ephemeris for the satellite and may occupy the numerical range of [0, 239] during normal operations.
>UDRE	M		ENUMERATED ( UDRE ≤1.0m, 1.0m < UDRE ≤ 4.0m, 4.0m < UDRE ≤ 8.0m, 8.0m < UDRE)	User Differential Range Error. This field provides an estimate of the uncertainty (1-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	M		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	М			
>CFN				
>>Activation CFN	M		CFN 9.2.1.7	
>Separate Indication			NULL	

# 9.2.1.24D Delayed Activation Update

The Delayed Activation Update IE indicates a change of the activation of the DL power for a specific RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned criticality
CHOICE Delayed	M				_	
Activation Update						
>Activate						
>>CHOICE Activation	М				_	
Type						
>>>Synchronised						
>>>Activation CFN	М		CFN 9.2.1.7		_	
>>>Unsynchronised			NULL			
>>Initial DL TX Power	М		DL Power		_	
			9.2.1.21			
>>First RLS Indicator	0		9.2.2.16A	FDD Only	_	
>>Propagation Delay	0		9.2.2.35	FDD Only	_	
>>Extended	0		9.2.2.35A	FDD Only	YES	reject
Propagation Delay				-		-
>Deactivate						
>>CHOICE	M				_	
Deactivation Type						
>>>Synchronised						
>>>>Deactivation	M		CFN 9.2.1.7		_	
CFN						
>>>Unsynchronised			NULL			

#### 9.2.1.24E Discard Timer

The *Discard Timer* IE defines the time to live for a MAC-hs SDU starting from the instant of its arrival into an HSDPA Priority Queue. The Node B shall use this information to discard out-of-data MAC-hs SDUs from the HSDPA Priority Queues.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Discard Timer			ENUMERATED (20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 250, 300, 400, 500, 750, 1000, 1250, 1500, 1750, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 7500,)	Unit: ms

# 9.2.1.25 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Diversity Control Field			ENUMERATED (	
			May,	
			Must,	
			Must Not,	
			)	

# 9.2.1.26 Diversity Indication

Void.

9.2.1.26A DL DPCH Timing Adjustment

Void.

9.2.1.27 DSCH ID

Void.

9.2.1.27A DSCH Information Response

Void

9.2.1.28 DSCH Transport Format Set

Void.

9.2.1.29 DSCH Transport Format Combination Set

Void.

## 9.2.1.29A End Of Audit Sequence Indicator

Indicates if the AUDIT RESPONSE message ends an audit sequence or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
End Of Audit Sequence			ENUMERATED (	"End of audit sequence" = all
Indicator			End of audit	audit information has been
			sequence,	provided by the Node B.
			Not end of audit	"Not end of audit sequence" =
			sequence)	more audit information is
				available.

# 9.2.1.29B FN Reporting Indicator

The Frame Number Reporting Indicator indicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FN Reporting Indicator			ENUMERATED ( FN Reporting Required,	
			FN Reporting Not Required)	

# 9.2.1.30 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH [TDD - DSCH] for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Handling Priority			INTEGER (015)	"0" = lowest priority,
				 "15" = highest priority

#### 9.2.1.31 Frame Offset

The Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame Offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and the least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Offset			INTEGER (0255)	Frames

## 9.2.1.31A IB\_OC\_ID

The IB OC ID identifies the occurrence of a specific Information Block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB OC ID			INTEGER (116)	

## 9.2.1.31B GPS Navigation Model & Time Recovery

This IE contains subframes 1 to 3 of the GPS navigation message. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		1 <maxno Sat&gt;</maxno 		
>Transmission TOW	М		INTEGER (01048575)	Time of the Week when the message is broadcast.
>SatID	М		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>TLM Message	М		BIT STRING (14)	
>Tlm Revd (C)	М		BIT STRING (2)	
>HO-Word	М		BIT STRING (22)	
>WN	М		BIT STRING (10)	
>C/A or P on L2	М		BIT STRING (2)	
>User Range Accuracy Index	М		BIT STRING (4)	
>SV Health	М		BIT STRING (6)	
>IODC	М		BIT STRING (10)	
>L2 P Data Flag	М		BIT STRING (1)	
>SF 1 Reserved	М		BIT STRING (87)	
>T <sub>GD</sub>	М		BIT STRING (8)	
>t <sub>oc</sub>	М		BIT STRING (16)	
>af <sub>2</sub>	М		BIT STRING (8)	
>af₁	М		BIT STRING (16)	
>af <sub>0</sub>	М		BIT STRING (22)	
>C <sub>rs</sub>	М		BIT STRING (16)	
>Δn	М		BIT STRING (16)	
>M <sub>0</sub>	М		BIT STRING (32)	
>C <sub>uc</sub>	М		BIT STRING (16)	
>e	М		BIT STRING (32)	
>C <sub>us</sub>	М		BIT STRING (16)	
>(A) <sup>1/2</sup>	М		BIT STRING (32)	
>t <sub>oe</sub>	М		BIT STRING (16)	
>Fit Interval Flag	М		BIT STRING (1)	
>AODO	М		BIT STRING (5)	
>C <sub>ic</sub>	М		BIT STRING (16)	
>OMEGA <sub>0</sub>	М		BIT STRING (32)	
>C <sub>is</sub>	М		BIT STRING (16)	
>i <sub>0</sub>	М		BIT STRING (32)	
>C <sub>rc</sub>	М		BIT STRING (16)	
>ω	М		BIT STRING (32)	
>OMEGAdot	М		BIT STRING (24)	
>ldot	М		BIT STRING (14)	
>Spare/zero fill	М		BIT STRING (20)	

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be provided

# 9.2.1.31C 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 <sub>0</sub>	M		BIT STRING (8)	
$\alpha_1$	М		BIT STRING (8)	
$\alpha_2$	М		BIT STRING (8)	
α <sub>3</sub>	M		BIT STRING (8)	
βο	M		BIT STRING (8)	
β <sub>1</sub>	M		BIT STRING (8)	
$\beta_2$	M		BIT STRING (8)	
β <sub>3</sub>	M		BIT STRING (8)	

## 9.2.1.31D GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
A <sub>1</sub>	M		BIT STRING (24)	
A <sub>0</sub>	M		BIT STRING (32)	
t <sub>ot</sub>	M		BIT STRING (8)	
$\Delta t_{LS}$	M		BIT STRING (8)	
WN <sub>t</sub>	M		BIT STRING (8)	
WN <sub>LSF</sub>	M		BIT STRING (8)	
DN	M		BIT STRING (8)	
$\Delta t_{LSF}$	M		BIT STRING (8)	

# 9.2.1.31E GPS Real-Time Integrity

This IE provides the information regarding the status of the GPS constellation. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Bad Satellites Presence	М			
>Bad Satellites				
>>Satellite Information		1 <maxno Sat&gt;</maxno 		
>>>BadSatID	M		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>No Bad Satellites			NULL	

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be provided

## 9.2.1.31F GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see [27].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
		_	Reference	-
$WN_a$	M		BIT STRING (8)	
Satellite Information	M	1 <maxno OfSatAlma nac&gt;</maxno 		See Note 1.
>DataID	M		INTEGER (03)	
>SatID	М		INTEGER (063)	Identifies the satellite and is equal to (SV ID No - 1) where SV ID No is defined in [27].
>e	M		BIT STRING (16)	
>t <sub>oa</sub>	M		BIT STRING (8)	
>δi	M		BIT STRING (16)	
>OMEGADOT	M		BIT STRING (16)	
>SV Health	M		BIT STRING (8)	
>A <sup>1/2</sup>	M		BIT STRING (24)	
>OMEGA <sub>0</sub>	M		BIT STRING (24)	
>M <sub>0</sub>	M		BIT STRING (24)	
>ω	М		BIT STRING (24)	
>af <sub>0</sub>	M		BIT STRING (11)	
>af <sub>1</sub>	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	M		ENUMERATED ( North, South)	
Degrees of Latitude	M		INTEGER (02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>23</sup> X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	M		INTEGER (-2 <sup>23</sup> 2 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>24</sup> X /360 < N+1 X being the longitude in degree (-180°+180°)
Direction of Altitude	M		ENUMERATED ( Height, Depth)	
Altitude	M		INTEGER (02 <sup>15</sup> -1)	The relation between the value (N) and the altitude (a) in meters it describes is N≤ a <n+1, except="" for="" n="2&lt;sup">15-1 for which the range is extended to include all greater values of (a).</n+1,>

# 9.2.1.31Ga HSDPA Capability

This parameter defines the HSDPA capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HSDPA Capability			ENUMERATED (HSDPA Capable, HSDPA non Capable)	

# 9.2.1.31H HS-DSCH Information To Modify

The *HS-DSCH Information To Modify* IE is used for modification of HS-DSCH information in a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxno ofMACdFl ows&gt;</maxno 			-	
>HS-DSCH MAC-d Flow ID	М		9.2.1.311		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		0 <maxno ofPrioQue ues&gt;</maxno 			_	
>CHOICE Priority Queue	М				_	
>>Add Priority Queue						
>>>Priority Queue ID	M		9.2.1.49C		_	
>>>Associated HS- DSCH MAC-d Flow	M		HS-DSCH MAC-d Flow ID 9.2.1.31I	Shall only refer to an HS-DSCH MAC-d flow already existing in the old configuration. Multiple Priority Queues can be associated with the same HS-DSCH MAC-d Flow ID.	_	
>>>Scheduling Priority Indicator	M		9.2.1.53H		_	
>>>T1	M		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	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>>>MAC-d PDU Size	M		9.2.1.38A	Shall be ignored if Maximum	_	

	1	T			1	1
				MAC-d PDU		
	1			Size Extended		
				IE is present.		
>>>RLC Mode	M		9.2.1.52B		_	
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size Extended			Size			
			Extended			
			9.2.1.38C			
>>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	0		9.2.1.53H	J	_	
Indicator			0.2.1.0011			
>>>T1	0		9.2.1.56a		_	
>>>Discard Timer	Ō		9.2.1.24E		_	
>>>MAC-hs Window	0		9.2.1.38B		_	
Size			9.2.1.300		_	
	0		0.2.1.2010			
>>>MAC-hs Guaranteed	0		9.2.1.38Aa		_	
Bit Rate	<del>                                     </del>	0 1000100		<del> </del>		
>>>MAC-d PDU Size		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Index		ofMACdP				
		DUindexes				
		>				
>>>SID	M		9.2.1.531	Shall be	_	
				ignored if		
				Maximum		
				MAC-d PDU		
				Size Extended		
				IE is present.		
>>>>MAC-d PDU Size	M		9.2.1.38A	Shall be	_	
				ignored if		
				Maximum		
				MAC-d PDU		
				Size Extended		
				IE is present.		
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size Extended			Size			_
			Extended			
			9.2.1.38C			
>>Delete Priority Queue						
>>>Priority Queue ID	М		9.2.1.49C	Shall only refer	_	
7771 Holly Quode 15	'*'		0.2.1.100	to a Priority		
				Queue already		
				existing in the		
				old		
				configuration.		
MAC-hs Reordering Buffer	0		9.2.1.38Ab	oorniguration.	_	
Size for RLC-UM			3.2.1.30AD		_	
	0	-	0.0.0.04D	For EDD ank		
CQI Feedback Cycle k			9.2.2.21B	For FDD only	_	
CQI Repetition Factor	0		9.2.2.4Cb	For FDD only	_	1
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	_	
	0		9.2.1.31L			
HS-SCCH Code Change	1					
Grant						1
Grant	0		9.2.3.18F	For TDD only	_	
Grant TDD ACK NACK Power	0		9.2.3.18F	For TDD only	_	
TDD ACK NACK Power Offset				·	- YES	ianore
Grant TDD ACK NACK Power	0 0		9.2.3.18F 9.2.2.18a UL SIR	For TDD only  For FDD only  Applicable to	YES YES	ignore ignore

				only		
UE Capabilities Information		01		·	YES	ignore
>HS-DSCH Physical Layer Category	М		9.2.1.31la		1	
>1.28 Mcps TDD Uplink Physical Channel Capability	0		9.2.3.5Gc	Applicable to 1.28Mcps TDD only	YES	ignore
>Number of Supported Carriers	0		ENUMERA TED ( One-one carrier, One-three carrier, Three-three carrier, One-six carrier, Three-six carrier, Six-six carrier,)	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier(s) the UE can support at the same time, where 'x-y carrier' means x for the uplink, and y for the downlink.	YES	reject
HS-SICH TPC step size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	ignore
HS-PDSCH Code Change Grant	0		9.2.1.31N	For FDD only	YES	ignore
MIMO Mode Indicator	0		9.2.2.72	For FDD only	YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.31ID		YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	For FDD only	YES	ignore
Enhanced HS Serving CC Abort	0		ENUMERA TED (Abort Enhanced HS Serving CC,)	For FDD only	YES	reject

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.

NS-DSCH MAC-d Flow   D	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
SAILocation/Retention			ofMACdFl			-	
Priority		М		9.2.1.311		_	
STransport Bearer Request Indicator   Shall be ingored if bearer establishment with ALCAP.		0		9.2.1.1A	-		
STRINGT Layer Address   O   S.2.1.63   Shall be garer establishment with ALCAP.	>Transport Bearer Request Indicator			9.2.1.62A		_	
	>Binding ID	0		9.2.1.4	ignored if bearer establishment	_	
Priority Queue Information  O <maxno of="" prioque="" ues="">  &gt;Priority Queue ID  AScheduling Priority Indicator  &gt;Discard Timer  &gt;MAC-hs Guaranteed Bit Rate  CQI Power Offset  O  9.2.1.24E </maxno>	>Transport Layer Address	0		9.2.1.63	ignored if bearer establishment	_	
Scheduling Priority   Queue ID   M   9.2.1.49C   -		0		9.2.1.58A	ignored if bearer establishment	YES	ignore
Scheduling Priority	Priority Queue Information		ofPrioQue			_	
Scheduling Priority   O     9.2.1.53H     -	>Priority Queue ID	М		9.2.1.49C		_	
SMAC-hs Guaranteed Bit Rate   CQI Power Offset   O   9.2.1.38Aa	>Scheduling Priority					_	
SMAC-hs Guaranteed Bit Rate   CQI Power Offset   O   9.2.1.38Aa	>Discard Timer	0		9.2.1.24E		_	
ACK Power Offset  NACK Power Offset  O  9.2.2.b  For FDD only  NACK Power Offset  O  9.2.2.23a  For FDD only  -  HS-SCCH Power Offset  O  9.2.2.18l  For FDD only  -  TDD ACK NACK Power  Offset  HARQ Preamble Mode  O  9.2.2.18a  For FDD only  For TDD only  -  Offset  HARQ Preamble Mode  O  9.2.2.18a  For FDD only  For TDD only  -  Offset  HARQ Preamble Mode  O  9.2.2.18a  For FDD only  YES  ignore  9.2.1.67A  1.28Mcps TDD  Only  YES  ignore  YES  ignore  YES  ignore  2.1.28 Mcps TDD Uplink  Physical Channel Capability  Number of Supported  Carriers  O  ENUMERA  TED (  One-one  carrier,  One-three  carrier,  Three-three  carrier,  Three-three  carrier,  Three-three  carrier,  Three-three  carrier,  Three-three  carrier,  Three-six  carrier,  Three-six  carrier,  Three-six  carrier means x  for the uplink,  six-six  and y for the  downlink.	>MAC-hs Guaranteed Bit					-	
ACK Power Offset  NACK Power Offset  O  9.2.2.3a For FDD only - HS-SCCH Power Offset O  9.2.2.18I For FDD only - TDD ACK NACK Power Offset O  9.2.3.18F For TDD only - TDD ACK NACK Power Offset HARQ Preamble Mode O  HS-SICH SIR Target O  UL SIR Applicable to 9.2.1.67A 1.28Mcps TDD Only  YES ignore 1.28Mcps TDD Only  NEC ategory  I SIM Carrier, One-three carrier, One-six carrier, Three-three carrier, Three-three carrier, Three-three carrier, Three-six carrier, Three-six carrier, Three-six carrier, Three-six carrier, Three-six carrier, Six-six carrier, Six-six carrier, Own-link Six-six carrier, Compulsive Compulsion  Por FDD only -  HS-FDD only -  HS-BD only  HS-BD only -  HS-BD only  HS-BD	CQI Power Offset	0		9.2.2.4Ca	For FDD only	_	
HS-SCCH Power Offset   O   9.2.2.18    For FDD only   -     Offset   O   9.2.3.18F   For TDD only   -   Offset   O   9.2.3.18F   For TDD only   -   Offset   O   Offset   O   9.2.2.18a   For FDD only   YES   ignore   O   Orly	ACK Power Offset	0		9.2.2.b	For FDD only	_	
TDD ACK NACK Power Offset  HARQ Preamble Mode  O  9.2.2.18a For FDD only  HS-SICH SIR Target  O  UL SIR SICH SIR Target  O  O  JECAPABILITIES Information  NHS-DSCH Physical Layer Category  NIMBER OF Supported  Carriers  O  ENUMERA Carrier, Carrier, Cone-three carrier, Cone-six Carrier, Three-three carrier, Carrier, Three-six Carrier, Three-six Carrier, Three-six Carrier, Three-six Carrier, Three-six Carrier, Three-six Carrier, Tore TDD only  YES Ignore  Applicable to 1.28Mcps TDD Only  YES Ignore  YES Ignore  YES Ignore  1.28Mcps TDD Only This IE One-three Carrier, Three-three Carrier, Three-six Carrier, Three-six Carrier' Tore three Three-six Carrier' Three-six Carrier	NACK Power Offset				For FDD only	_	
Offset HARQ Preamble Mode O 9.2.2.18a For FDD only YES ignore UL SIR 9.2.1.67A 1.28Mcps TDD only  VES ignore  VES	HS-SCCH Power Offset			9.2.2.181	For FDD only	_	
HS-SICH SIR Target  O  UL SIR 9.2.1.67A  Applicable to 1.28Mcps TDD only  YES ignore  VES ignore  O1  PHS-DSCH Physical Layer Category  >1.28 Mcps TDD Uplink Physical Channel Capability  Number of Supported Carriers  O  ENUMERA Applicable to 1.28Mcps TDD only  PES ignore  YES ignore  YES ignore  YES ignore  VES ignore  PES ignore  PES ignore  PES ignore  PES ignore  PES ignore  Number of Supported Carriers  O  ENUMERA Applicable to 1.28Mcps TDD only  TED ( 1.28Mcps TDD One-one only carrier, This IE indicates the		0		9.2.3.18F	For TDD only	_	
Section   Sect							ignore
UE Capabilities Information       01       YES       ignore         >HS-DSCH Physical Layer Category       M       9.2.1.31la       YES       ignore         >1.28 Mcps TDD Uplink Physical Channel Capability       O       9.2.3.5Gc       Applicable to 1.28Mcps TDD only       YES       ignore         >Number of Supported Carriers       O       ENUMERA TED ( One-one carrier, This IE indicates the number of carrier, Three-three carrier, One-three carrier, UE can support at the same carrier, time, where 'x-y Three-six carrier' means x carrier' means x carrier, for the uplink, Six-six and y for the carrier,)	HS-SICH SIR Target	0			1.28Mcps TDD	YES	ignore
SHS-DSCH Physical Layer Category  >1.28 Mcps TDD Uplink Physical Channel Capability  O  ENUMERA TED ( 1.28Mcps TDD Only only only only carrier, This IE indicates the carrier, One-six at the same carrier, Three-six carrier, for the uplink, Six-six and y for the carrier,)  SHS-DSCH Physical Layer ( M	<b>UE Capabilities Information</b>		01			YES	ignore
Section 20   Sec	>HS-DSCH Physical Layer Category					YES	
Carriers  TED ( One-one only only This IE One-three carrier, number of carrier(s) the UE can support at the same tarrier, Three-six carrier, time, where 'x-y carrier, means x carrier, for the uplink, Six-six and y for the carrier,)  The D ( 1.28Mcps TDD only This IE Indicates the number of carrier(s) the UE can support at the same time, where 'x-y carrier' means x carrier, for the uplink, and y for the downlink.		0		9.2.3.5Gc	1.28Mcps TDD only	YES	ignore
LHS-SICH TPC step size	Carriers			TED ( One-one carrier, One-three carrier, Three-three carrier, One-six carrier, Three-six carrier, Six-six carrier, Six-six carrier,)	1.28Mcps TDD only This IE indicates the number of carrier(s) the UE can support at the same time, where 'x-y carrier' means x for the uplink, and y for the downlink.		
1.28Mcps TDD	HS-SICH TPC step size	0		9.2.3.21a	Applicable to	YES	ignore

			only		
MIMO Mode Indicator	0	9.2.2.72	For FDD only	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0	9.2.2.74A	For FDD only	YES	ignore
Enhanced HS Serving CC Abort	0	ENUMERA TED (Abort Enhanced HS Serving CC,)	For FDD only	YES	reject

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues

# 9.2.1.31Ha HS-DSCH Initial Capacity Allocation

The *HS-DSCH Initial Capacity Allocation* IE provides flow control information for each scheduling priority class for the HS-DSCH FP over Iub.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH Initial Capacity Allocation		1 <max noofPrio Queues &gt;</max 			_	
>Scheduling Priority Indicator	М		9.2.1.53H		_	
>Maximum MAC-d PDU Size	М		MAC-d PDU Size 9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>HS-DSCH Initial Window Size	М		9.2.1.31Hb		_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	ignore

Range Bound	Explanation
maxnoofPrioQueues	Maximum number of Priority Queues

## 9.2.1.31Hb HS-DSCH Initial Window Size

Indicates the initial number of MAC-d PDUs (or octets in case *HS-DSCH MAC-d PDU Size Format* = "Flexible MAC-d PDU Size") that may be transmitted before new credits are received from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Initial Window Size			INTEGER (1255)	Number of MAC-d PDUs If HS-DSCH MAC-d PDU Size Format = "Flexible MAC-d PDU Size" the credit shall be determined in octets: credit (in octets) = Maximum MAC-d PDU Size Extended * HS-DSCH Initial Window Size

## 9.2.1.31I HS-DSCH MAC-d Flow ID

HS-DSCH MAC-d Flow ID is the unique identifier for one MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow ID			INTEGER (07)	

# 9.2.1.31IA HS-DSCH MAC-d Flows Information

The *HS-DSCH MAC-d Flows Information* IE is used for the establishment of HS-DSCH MAC-d flows for a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		1 <maxno ofMACdFl ows&gt;</maxno 			_	

>HS-DSCH MAC-d Flow ID	М		9.2.1.311		_	
>Allocation/Retention	M		9.2.1.1A		_	
Priority						
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	-	
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		1 <maxno ofPrioQue ues&gt;</maxno 			_	
>Priority Queue ID	М		9.2.1.49C		_	
>Associated HS-DSCH MAC-d Flow	M		HS-DSCH MAC-d Flow ID 9.2.1.31I	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	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	0		9.2.1.38Aa		-	
>MAC-d PDU Size Index		1 <maxno ofMACdP DUindexes</maxno 			_	
>>SID	М		9.2.1.531	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>>MAC-d PDU Size	М		9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>RLC Mode	M		9.2.1.52B		-	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	reject

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues
maxnoofMACdPDUindexes	Maximum number of different MAC-d PDU SIDs

# 9.2.1.31IB HS-DSCH MAC-d Flows To Delete

The *HS-DSCH MAC-d Flows To Delete* IE is used for the removal of HS-DSCH MAC-d flows from a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flows To Delete		1 <maxno ofMACdFl ows&gt;</maxno 		
>HS-DSCH MAC-d Flow ID	M		9.2.1.311	

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows

### 9.2.1.31IC HS-DSCH MAC-d PDU Size Capability

This parameter defines the capability for a Local Cell to support different MAC-d PDU Size formats. If this IE is set to "Flexible Size Capable" the Local Cell is "Indexed Size Capable" and "Flexible Size Capable". If not present or set to "Indexed Size Capable" the Local Cell is only "Indexed Size Capable".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d PDU Size Capability			ENUMERAT ED (Indexed Size Capable, Flexible Size	
			Capable)	

#### 9.2.1.31ID HS-DSCH MAC-d PDU Size Format

The *HS-DSCH MAC-d PDU Size Format* IE provides information about the type of MAC-d PDU Size Format used for HS-DSCH. "Indexed MAC-d PDU Size" uses MAC-d PDU sizes based on *SID* IE and *MAC-d PDU Size* IE of *MAC-d PDU Size* IE. "Flexible MAC-d PDU Size" uses a flexible MAC-d PDU size with a maximum PDU size as defined by *Maximum MAC-d PDU Size Extended* IE of *Priority Queue Information* IE. The actual MAC-d PDU size is determined as specified in [24] and [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d PDU Size			ENUMERATED	
Format			(Indexed MAC-d	
			PDU Size, Flexible	
			MAC-d PDU Size)	

#### 9.2.1.31la HS-DSCH Physical Layer Category

The HS-DSCH Physical Layer Category IE defines a set of UE radio access capabilities related to HSDPA, as defined in [33].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Physical Layer Category			INTEGER (164,)	

#### 9.2.1.31laa HS-DSCH Provided Bit Rate Value

The HS-DSCH Provided Bit Rate Value IE indicates the HS-DSCH Provided Bit Rate as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Provided Bit Rate Value			INTEGER (02^24-1,, 2^24256,000,000)	Expressed in bit/s for FDD, 1.28Mcps TDD and 3.84Mcps TDD. For 7.68Mcps TDD the value shall be doubled to give the value in bit/s.

#### 9.2.1.31lb HS-DSCH Provided Bit Rate Value Information

The HS-DSCH Provided Bit Rate Value Information IE reports the HS-DSCH Provided Bit Rate Value IE for each priority class.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS-DSCH Provided Bit Rate		1 <maxno< td=""><td></td><td></td></maxno<>		
Value Information		ofPriorityCl		
		asses>		
>Scheduling Priority Indicator	M		9.2.1.53H	
>HS-DSCH Provided Bit	M		9.2.1.31laa	
Rate Value				

Range Bound	Explanation
maxNoofPriorityClasses	Maximum number of HS-DSCH Scheduling Priorities

#### 9.2.1.31lba HS-DSCH Required Power Value

The *HS-DSCH Required Power Value* IE indicates the minimum necessary power for a given priority class to meet the Guaranteed Bit Rate for all the established HS-DSCH connections belonging to this priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Required Power 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&gt;</maxno 		
>Scheduling Priority Indicator	M		9.2.1.53H	
>HS-DSCH Required Power Value	M		9.2.1.31lba	
>HS-DSCH Required Power Per UE Information		0 <maxno ofContexts onUeList&gt;</maxno 		List of UEs with Guaranteed Bit Rate indicating their required power consumption relative to the HS-DSCH Required Power Value.
>>CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCCC" shall not be used.
>>HS-DSCH Required Power Per UE Weight	0		INTEGER (0100)	Expressed in percentage of the value provided in the HS-DSCH Required Power Value IE

Range Bound	Explanation
maxNoofContextsonUeList	Maximum number of Communication Contexts to include in the list of UEs
maxNoofPriorityClasses	Maximum number of HS-DSCH Scheduling Priorities

# 9.2.1.31J HS-DSCH RNTI

The HS-DSCH RNTI is used for the UE-specific CRC in HS-SCCH and HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH RNTI			INTEGER (065535)	

# 9.2.1.31K HS-SCCH Code Change Indicator

The HS-SCCH Code Change Indicator indicates whether the HS-SCCH Code change is needed or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change			ENUMERATED (HS-	
Indicator			SCCH Code Change	
			needed)	

# 9.2.1.31L HS-SCCH Code Change Grant

The HS-SCCH Code Change Grant IE indicates that modification of HS-SCCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Grant			ENUMERATED	
			(Change Granted)	

# 9.2.1.31M HS-PDSCH Code Change Indicator [FDD]

The HS-PDSCH Code Change Indicator indicates whether the HS-PDSCH Code change is needed or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH Code Change			ENUMERATED (HS-	
Indicator			PDSCH Code	
			Change needed)	

## 9.2.1.31N HS-PDSCH Code Change Grant [FDD]

The HS-PDSCH Code Change Grant IE indicates that modification of HS-PDSCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH Code Change			ENUMERATED	
Grant			(Change Granted)	

# 9.2.1.32 IB\_SG\_DATA

Segment as defined in ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_DATA			BIT STRING	Contains "SIB data fixed" or "SIB data variable" in segment as encoded in ref. [18]. See Annex D

# 9.2.1.33 IB\_SG\_POS

The lowest position of a specific Information Block segment in the SFN cycle (IB\_SG\_POS < IB\_SG\_REP).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_POS			INTEGER (04094)	Only even positions are allowed. See ref. [18]

## 9.2.1.34 IB\_SG\_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when SFN mod IB\_SG\_REP = IB\_SG\_POS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IB_SG_REP			ENUMERATED (4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096)	Repetition period for the IB segment in frames

## 9.2.1.35 IB Type

The IB Type identifies a specific system information block.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
В Туре			ENUMERATED ( MIB, SB1, SB2, SIB1, SIB2, SIB3, SIB4, SIB5, SIB6, SIB7, not-Used-SIB8, not-Used-SIB9, not-Used-SIB10, SIB11, SIB12, SIB13, SIB13.1, SIB13.2, SIB13.3, SIB13.4, SIB13.4, SIB15.5, SIB15.1, SIB15.2, SIB15.3, SIB16,,	
			SIB17, SIB15.4, SIB15.5, SIB15.5, SIB5bis, SIB11bis, SIB15bis, SIB15.1bis, SIB15.2bis, SIB15.3bis, SIB15.6, SIB15.7, SIB15.8, SIB15.2ter, SIB19)	

# 9.2.1.36 Indication Type

Void.

# 9.2.1.36A Information Exchange Object Type

Void.

# 9.2.1.36B Information Report Characteristics

The information report characteristics defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Report Characteristics Type	М			
>On Demand >Periodic			NULL	
>>CHOICE Information Report Periodicity Scale	М			The frequency with which the Node B shall send information reports.
>>>minute				
>>>Report Periodicity Value	М		INTEGER (160,)	Unit: min
>>>hour				
>>>Report Periodicity Value	М		INTEGER (124,)	Unit: h
>On Modification				
>>Information Threshold	0		9.2.1.36E	

# 9.2.1.36C Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	M		INTEGER	
			(02^20-1)	

# 9.2.1.36D Information Type

The Information Type indicates which kind of information the Node B shall provide.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Information Type Item	М		ENUMERATE D ( GPS Information, DGPS Corrections, GPS RX Pos,		-	• <b>,</b>
			, GANSS Information, DGANSS Corrections, GANSS RX Pos)			
GPS Information	C-GPS	0 <maxno GPSItems&gt;</maxno 			ı	
>GPS Information Item			ENUMERATE D ( GPS Navigation Model & Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real- Time Integrity,)			
GANSS Information	C-GANSS	1	,		YES	ignore
>GANSS Common Data		01			_	
>>Ionospheric Model	0		BOOLEAN	True means requested	_	
>>Additional Ionospheric Model	0		Data ID BIT STRING(2)	Presence means requested according to Data ID as defined in [18]. Absence means not requested.	YES	ignore
>>Earth Orientation Parameters	0		BOOLEAN	True means requested	YES	ignore
>GANSS Generic Data		0 <maxno GANSS&gt;</maxno 			_	
>>GANSS ID	0		9.2.1.104		_	
>>GANSS Navigation Model And Time Recovery	0		BOOLEAN	True means requested	-	
>>GANSS Time Model GNSS- GNSS	0		BIT STRING(9)	Defines the time model required.  Bit 1 is the MSB and bit 9 is the LSB (see section 9.2.0).  Bit 1:GPS, Bit 2:Galileo,	-	

				Bit 3:QZSS,		
				Bit 4:GLONASS		
				Other bits are		
				reserved.		
>>GANSS UTC	0		BOOLEAN	True means	-	
Model				requested		
>>GANSS Almanac	0		BOOLEAN	True means	_	
2 2 37 ti 100 7 tiirianas	~		50022741	requested		
>>GANSS Real	0		BOOLEAN	True means	_	
Time Integrity			BOOLE/ III	requested		
>>GANSS Data Bit		01		Toquesteu		
Assistance		01				
>>>GANSS TOD	M		INTEGER	The GANSS		
>>>GANGS TOD	IVI				_	
			(086399)	Time Of Day for which the data		
				bits are		
5 . 5				requested		
>>>Data Bit		1			_	
Assistance						
>>>>DGANSS	M		BIT	Defined in [18]	_	
Signal ID			STRING(8)			
>>>GANSS	M		INTEGER	Defined in [18]	_	
Data Bit Interval			(015)			
>>>Satellite		0 <maxga< td=""><td></td><td></td><td>_</td><td></td></maxga<>			_	
Information		NSSSat>				
>>>Sat ID	M		INTEGER(06	Identifies the	_	
			3)	satellite and is		
				equal to (SV ID		
				No - 1)		
>>GANSS	0		BOOLEAN	True means	YES	ignore
Additional				requested		J
Navigation Models				1 - 1		
And Time Recovery						
>>GANSS	0		BOOLEAN	True means	YES	ignore
Additional UTC	-			requested		.3
Models				242222		
>>GANSS Auxiliary	0		BOOLEAN	True means	YES	ignore
Information	-		30022/11	requested	0	19.1010
>>SBAS ID	C-GANSS-		9.2.1.107b	: 5 4	YES	ignore
7705,1015	ID		3.2.1.1075		. 20	1911010
DGANSS Corrections	C-	1			YES	ignore
Req	DGANSS	'			120	ignore
i Noq	Correction					
>DGANSS Signal ID	s M		BIT	Defined in [18]	_	
>DGANGS SIGNALID	IVI		STRING(8)		_	
CANCOLD						
>GANSS ID	0		9.2.1.104		_	

Condition	Explanation
DGANSSCorrections	The IE shall be present if the Information Type Item IE indicates
	"DGANSS Corrections".
GPS	The IE shall be present if the <i>Information Type Item</i> IE indicates "GPS"
	Information".
GANSS	The IE shall be present if the Information Type Item IE indicates
	"GANSS Information".
GANSS-ID	This IE shall be present if the GANSS ID IE indicates 'SBAS'.

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE
maxNoGPSItems	Maximum number of GPS Information Items supported in one Information Exchange
maxNoGANSS	Maximum number of GANSS Systems

#### 9.2.1.36E Information Threshold

The Information Threshold indicates which kind of information shall trigger the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Type Item	М			
>DGPS				
>>PRC Deviation	М		ENUMERATED (1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report
>DGANSS				
>>PRC Deviation	M		ENUMERATED (1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report

#### 9.2.1.36F IPDL Indicator

Indicates if IPDL periods shall be active or not.

IE/Group Name	Presence	Range	IE Type and 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	In case of E-DCH, value 8 and
			(15000,)	values not multiple of 8 shall
				not be used.

#### 9.2.1.38Aa MAC-hs Guaranteed Bit Rate

The MAC-hs Guaranteed Bit Rate IE indicates the guaranteed number of bits per second that Node B should deliver over the air interface under normal operating conditions (provided there is data to deliver). If the MAC-hs Guaranteed Bit Rate IE is received with the value set to 0 during RL set up or modification, no guarantee is applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Guaranteed Bit Rate			INTEGER (02^24-1,,	Unit: bit/s
			2^24256,000,000)	

## 9.2.1.38Ab MAC-hs Reordering Buffer Size for RLC-UM

The *MAC-hs Reordering Buffer Size for RLC-UM* IE indicates the portion of the buffer in the UE that can be used for RLC-UM traffic (i.e. for Priority Queues whose *RLC Mode* IE is set to "RLC-UM").

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Reordering Buffer Size			INTEGER (0300,)	Unit: kBytes And N kBytes = N*1024 Bytes. The Node B shall use this value to avoid the overflow of the MAC-hs reordering buffer.

#### 9.2.1.38Ac MAC-hs Reset Indicator

The MAC-hs Reset Indicator IE indicates that a reset of the MAC-hs is not required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Reset Indicator			ENUMERATED	
			(MAC-hs	
			Not Reset)	

## 9.2.1.38B MAC-hs Window Size

The MAC-hs Window Size IE is used for MAC-hs PDU retransmission as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Window Size			ENUMERATED (4, 6, 8, 12, 16, 24, 32,)	For 1.28Mcps TDD when TSN length is configured to 9bits, ENUMERATED (32, 64, 96, 128, 160, 192, 256,)

#### 9.2.1.38C MAC PDU Size Extended

The MAC PDU Size Extended IE provides the size in octets of the MAC level PDU when an extended MAC level PDU size is required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC PDU Size Extended			INTEGER (11504,)	In case of E-DCH, value 1 shall not be used

# 9.2.1.39 Maximum DL Power Capability

This parameter indicates the maximum DL power capability for a local cell or a Power Local Cell Group within the Node B. The reference point is the antenna connector. If Transmit Diversity can be used in the local cell, the parameter indicates the maximum for the linear sum of the power that can be used on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum DL Power Capability			INTEGER (0500)	Unit: dBm
				Range: 050 dBm
				Step: 0.1 dB

#### 9.2.1.40 Maximum Transmission Power

The Maximum Transmission Power is the maximum value for the linear sum of the power of all downlink physical channels, that is allowed to be used in a cell. If Transmit Diversity is applied to one downlink physical channel, the power to be considered for this downlink physical channel is the linear sum of the power used for this downlink physical channel on all branches. [1.28Mcps TDD - For a multi-frequency cell, the Maximum Transmission Power is the maximum value for the linear sum of the power of all downlink physical channels, that is allowed to be used on one frequency in a cell.] The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Transmission Power			INTEGER (0500)	Unit: dBm
				Range: 050
				Step: 0.1 dB

#### 9.2.1.40A Measurement Availability Indicator

Void.

## 9.2.1.40B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale	М		110101010	
>millisecond				
>>Measurement Change Time Value	M		INTEGER (16000,)	Unit: ms Range: 1060000 ms Step: 10 ms

#### 9.2.1.41 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Filter Coefficient			ENUMERATED ( 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17,	
			19,)	

# 9.2.1.41A Measurement Hysteresis Time

The Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the Measurement Reporting procedure to be triggered.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Scale	М			
>millisecond				
>>Measurement Hysteresis Time Value	M		INTEGER (16000,)	Unit: ms Range: 1060000 ms Step: 10 ms

## 9.2.1.42 Measurement ID

The Measurement ID uniquely identifies any measurement per (Node B or Communication) Control Port.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			INTEGER	
			(02^20-1)	

## 9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Increase/Decrease Threshold	M				-	
>Received Total Wide Band Power						
>>Received Total Wide Band Power	M		INTEGER (0620)	Unit: dB Range: 062 dB Step: 0.1 dB	-	
>Transmitted Carrier Power						
>>Transmitted Carrier Power	М		INTEGER (0100)	According to mapping in [22] and [23]	_	
>Acknowledged PRACH Preambles				FDD only		
>>Acknowledged PRACH Preambles	М		INTEGER (0240,)	According to mapping in [22]	_	
>UL Timeslot ISCP				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	M		INTEGER (0126)	Unit: dB Range: 063 dB Step: 0.5 dB	-	
>Round Trip Time				FDD only		
>>Round Trip Time	M		INTEGER (032766)	Unit: chips Range: 0 2047.875 chips Step: 0.625 chips	_	
>Not Used 1			NULL	This choice shall not be used. Reject procedure if received.		
>Not Used 2			NULL	This choice shall not be used. Reject procedure if received.		
>Additional Measurement Thresholds				See Note 1.		
>>Transmitted Carrier Power Of All Codes Not Used For HSTransmission						
>>>Transmission  >>>Transmitted Carrier Power Of All Codes Not Used For HSTransmission	M		INTEGER (0100)	According to mapping in [22], measurement "Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICHTransmission"	YES	reject

>>Transmitted			and mapping in [23], measurement "Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS-SCCH Transmission" FDD only		
Carrier Power For Cell Portion					
>>>Transmitted Carrier Power For Cell Portion	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 (0620)	Unit: dB Range: 062 dB Step: 0.1 dB	YES	reject
>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH, HS-SCCH, E- AGCH, E-RGCH or E-HICH Transmission For Cell Portion			FDD only		
>>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS- SCCH, E-AGCH, E-RGCH or E- HICH Transmission For Cell Portion	M	INTEGER (0100)	Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH, HS-SCCH, E-AGCH, E-RGCH or E-HICH Transmission measurement in [22]	YES	reject
>>UpPCH interference			1.28Mcps TDD Only		
>>>UpPCH interference Value >>Received	M	INTEGER (0127,)	According to mapping in [23] FDD only	YES	reject
Scheduled E- DCH Power Share					
>>>RSEPS value	М	INTEGER (0151)	According to mapping in [22]	YES	reject
>>Received Scheduled E-DCH Power Share For Cell Portion			FDD only		
>>>RSEPS value	M	INTEGER (0151)	According to mapping in [22]	YES	reject
>>E-DCH RACH Report			FDD only		
>>> Denied E- DCH RACH Resources	M	INTEGER (0240,)	According to mapping in [25]	-	

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

# 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						
>>Transmitted Carrier Power	М		INTEGER (0100)	According to mapping in [22] and [23]	_	
>Acknowledged PRACH Preambles				FDD only		
>>Acknowledged PRACH Preambles	М		INTEGER (0240,)	According to mapping in [22]	_	
>UL Timeslot ISCP >>UL Timeslot	M		INTEGER	TDD only According to mapping	_	
ISCP >SIR	141		(0127)	in [23]		
>>SIR	М		INTEGER	According to mapping	_	
>SIR Error			(063)	in [22] and [23] FDD only		
>>SIR Error	М		INTEGER (0125)	According to mapping in [22]	_	
>Transmitted Code Power						
>>Transmitted Code Power	М		INTEGER (0127)	According to mapping in [22] and [23]	_	
>RSCP				TDD only		
>>RSCP	М		INTEGER (0127)	According to mapping in [23]	_	
>Rx Timing Deviation				Applicable to 3.84Mcps TDD only		
>>Rx Timing Deviation	М		INTEGER (08191)	According to mapping in [23]	_	
>Round Trip Time >>Round Trip Time	M		INTEGER	FDD only According to mapping	_	
•	IVI		(032767)	in [22]	_	
>Not Used 1			NULL	This choice shall not be used. Reject procedure if received.		
>Not Used 2			NULL	This choice shall not be used. Reject		
>Additional				procedure if received. See Note 1.		
Measurement Thresholds						
>>UTRAN GPS Timing Of Cell Frames For UE Positioning					_	
>>>Turran-gps Measurement Threshold Information	M		9.2.1.64B		YES	reject
>>SFN-SFN Observed Time Difference						
>>>SFN-SFN Measurement Threshold Information	М		9.2.1.53C		YES	reject
>>Rx Timing Deviation LCR				Applicable to 1.28Mcps TDD Only		
>>>Rx Timing Deviation LCR	М		INTEGER (0511)	According to mapping in [23]	YES	reject

>>HS-SICH			Applicable to TDD		
Reception Quality			Only		
>>>HS-SICH	М	INTEGER	According to mapping	YES	reject
Reception Quality		(020)	in [23]		
>>Transmitted Carrier Power Of All					
Codes Not Used					
For					
HSTransmission					
>>>Transmitted	М	INTEGER	According to mapping	YES	reject
Carrier Power Of All Codes Not		(0100)	in [22], measurement "Transmitted Carrier		
Used For			Power Of All Codes		
HSTransmission			Not Used For HS-		
			PDSCH, HS-SCCH,		
			E-AGCH, E-RGCH or		
			E-HICHTransmission"		
			and [23], measurement		
			"Transmitted Carrier		
			Power Of All Codes		
			Not Used For HS-		
			PDSCH Or HS-SCCH		
>>HS-DSCH			Transmission"		<del> </del>
Required Power					
>>>HS-DSCH	М	9.2.1.31lba		YES	reject
Required Power					
Value					
>>Transmitted Carrier Power For			FDD only		
Carrier Fower For					
>>>Transmitted	М	INTEGER	Mapping identical to	YES	reject
Carrier Power For		(0100)	the one for		,
Cell Portion			Transmitted Carrier		
			Power measurement in [22]		
>>Received Total			FDD only		
Wide Band Power			1.22 3,		
For Cell Portion					
>>>Received	М	INTEGER	Mapping identical to	YES	reject
Total Wide Band		(0621)	the one for Received		
Power For Cell Portion			Total Wide Band Power measurement		
1 Ortion			in [22]		
>>Transmitted			FDD only		
Carrier Power Of All					
Codes Not Used For HS-PDSCH,					
HS-SCCH, E-					
AGCH, E-RGCH or					
E-HICH					
Transmission For					
Cell Portion >>>Transmitted	M	INTEGER	Manning identical to	YES	roiget
>>> Transmitted Carrier Power Of	IVI	(0100)	Mapping identical to the one for	IES	reject
All Codes Not		(0100)	Transmitted Carrier		
Used For HS-			Power Of All Codes		
PDSCH, HS-			Not Used For HS-		
SCCH, E-AGCH,			PDSCH, HS-SCCH,		
E-RGCH or E- HICH			E-AGCH, E-RGCH or E-HICH Transmission		
Transmission			measurement in [22]		
Value For Cell					
Portion					
>>UpPCH			1.28Mcps TDD Only		
interference >>>UpPCH	M	INTEGER	According to mapping	YES	reject
>>>∪PF∪Π	IVI	INTEGER	According to mapping	IES	reject

interference Value		(0127,)	in [23]		
>>DL Transmission		\	FDD Only		
Branch Load			- ")		
>>>DL	M	INTEGER	According to mapping	YES	reject
Transmission		(0101,)	in [22]		
Branch Load					
Value					
>>HS-DSCH			FDD only		
Required Power					
For Cell Portion	N 4	HS-DSCH		VEC	mata 1
>>>HS-DSCH	M			YES	reject
Required Power		Required			
Value For Cell Portion		Power Value			
>>E-DCH Non-		9.2.1.31lba	FDD only		
serving Relative			FDD offig		
Grant Down					
Commands					
>>>E-DCH Non-	M	INTEGER	Down Commands per	YES	reject
serving Relative	101	(0100,)	second	120	reject
Grant Down		(3100,)	3300114		
Commands Value					
>>Rx Timing			Applicable to		
Deviation 768			7.68Mcps TDD Only		
>>>Rx Timing	M	INTEGER	According to mapping	YES	reject
Deviation 768		(065535)	in [23]	0	. 0,000
>>Rx Timing		(5.1.2000)	Applicable to		
Deviation 384			3.84Mcps TDD Only		
Extended					
>>>Rx Timing	M	INTEGER	According to mapping	YES	reject
Deviation 384		(032767)	in [23]		- ,
Extended					
>>Extended Round			FDD only		
Trip Time					
>>>Extended	M	INTEGER	Continuation of	YES	reject
Round Trip Time		(3276710304	intervals with step		-
Value		1)	size as defined in		
			[22].		
>>Received			FDD only		
Scheduled E-					
DCH Power					
Share		WITE OF S	A 11		
>>>RSEPS value	M	INTEGER	According to mapping	YES	reject
		(0151)	in [22]		
>>Received			FDD only		
Scheduled E-					
DCH Power					
Share for Cell					
Portion	NA.	INTEGER	A coording to recention	VEC	roit
>>>RSEPS value	M	INTEGER	According to mapping	YES	reject
>> Additional LIC		(0151)	in [22]		
>>Additional HS-			Applicable to		
SICH Reception  Quality			1.28Mcps TDD Only		
>>>HS-SICH	M	INTEGER	According to manning	YES	roinat
	IVI	(020)	According to mapping	150	reject
Reception Quality LCR		(020)	in [23] used when the		
LOR			Measurement		
			Threshold Value for		
			HS-SICH Reception		
			Quality are more than		
			20, Measurement		
			Threshold Value = 20		
			+ IE Value		
>>UTRAN GANSS		<del> </del>	· IL Value		
	i l	1	1		
Timing Of Cell					

>>>Tutran-ganss Measurement Threshold Information	M	9.2.1.99		YES	reject
>> E-DCH RACH Report			FDD only		
>>> Denied E- DCH RACH Resources	М	INTEGER (0240,)	According to mapping in [25]	-	

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

# 9.2.1.45 Message Discriminator

This field is used to discriminate between Dedicated NBAP and Common NBAP messages.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator			ENUMERATED (	
			Common,	
			Dedicated)	

# 9.2.1.45A Message Structure

The *Message Structure* IE gives information for each level with assigned criticality in an hierarchical message structure from top level down to the lowest level above the reported level for the occurred error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Message Structure		1 <maxno oflevels&gt;</maxno 		The first repetition of the Message Structure IE corresponds to the top level of the message. The last repetition of the Message Structure IE corresponds to the level above the reported level for the occurred error of the message.
>IE ID	M		INTEGER (065535)	The IE ID of this level"s IE containing the not understood or missing IE.
>Repetition Number	0		INTEGER (1256)	The Repetition Number IE gives, if applicable, the number of occurrences of this level"s reported IE up to and including the occurrence containing the not understood or missing IE.  Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.

Range Bound	Explanation
maxnooflevels	Maximum number of message levels to report. The value for
	maxnooflevels is 256.

# 9.2.1.46 Message Type

The Message Type uniquely identifies the message being sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Procedure ID	М	1	Reference	
>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 Termination "10" = 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 Report "19" = Dedicated Measurement Termination "20" = Downlink Power Control "21" = Error Indication (For Dedicated Procedures) "23" = Radio Link Addition "24" = Radio Link Restoration "25" = Radio Link Setup "28" = Resource Status Indication "29" = Synchronised Radio Link Reconfiguration Cancellation "30" = Synchronised Radio Link Reconfiguration Cancellation "30" = Synchronised Radio Link Reconfiguration Preparation "32" = System Information Update "33" = Unblock Resource "34" = Unsynchronised Radio Link Reconfiguration Preparation "35" = Error Indication (For Common Procedures) "37" = Physical Shared Channel Reconfiguration "36" = Error Indication (For Common Procedures) "37" = Physical Shared Channel Reconfiguration "49" = Lell Synchronisation Adjustment "44" = Cell Synchronisation Adjustment "44" = Cell Synchronisation Reconfiguration "44" = Cell Synchronisation Reconfiguration "44" = Cell Synchronisation Reconfiguration "45" = Cell Synchronisation Reconfiguration "46" = Cell Synchronisation Reconfiguration "47" = Cell Synchronisation Termination "49" = Cell Synchronisation Reconfiguration "47" = Cell Synchronisation Failure
>Ddmode	M		ENUMERATED (	"53" = MBMS Notification Update Common = common to FDD and TDD.
			TDD,	
			FDD, Common,	
			)	
Type of Message	M		ENUMERATED (	

Initiating	
Message,	
Successful	
Outcome,	
Unsuccessful	
Outcome,	
Outcome)	

#### 9.2.1.46a MICH CFN

The MICH CFN indicates the Connection Frame Number for the MICH. It corresponds to the Cell SFN of the frame in which the start of the S-CCPCH frame is located, see ref [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MICH CFN			INTEGER (04095)	·

## 9.2.1.46A Minimum DL Power Capability

This parameter indicates the minimum DL power capability for a local cell within the Node B. The reference point is the antenna connector. If Transmit Diversity can be used in the local cell, the parameter indicates the minimum for the linear sum of the power that can be used on all branches.

IE/Group Name	Presence	Range	IE Type and	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	Unit: ms
			(1280, 2560, 5120,	
			10240)	

## 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-ld	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	М		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot	0		9.2.3.23	
Midamble Shift And Burst Type	0		9.2.3.7	

# 9.2.1.47E Neighbouring TDD Cell Measurement Information LCR

This IE provides information on the neighbouring 1.28Mcps TDD cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time Slot LCR* IE and *Midamble Shift LCR* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UC-ld	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot LCR	0		9.2.3.24A	
Midamble Shift LCR	0		9.2.3.7A	

#### 9.2.1.47F NI

The NI IE provides a Notification Indicator determined as specified in [37].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NI			INTEGER (065535)	

#### 9.2.1.48 Node B Communication Context ID

The Node B Communication Context ID is the identifier of the Communication Context in the Node B, it corresponds to the dedicated resources which are necessary for an UE using one or more dedicated channels in a given Node B.

IE/Group Name	Presence	Range	IE Type and 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 or across all Common MAC flows within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID			INTEGER (07)	

# 9.2.1.49D 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 [FDD - Value "0" is not applicable for E-DPCH.]

## 9.2.1.50A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
QE-Selector			ENUMERATED (	
			Selected,	
			Non-Selected)	

## 9.2.1.51 Report Characteristics

The report characteristics define how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Report Characteristics	M				_	
>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 >Event B	0		9.2.1.41A		-	
	1.4		0.04.44	The sthere he hald for		
>>Measurement Threshold	М		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					
>>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	M		Measurement Threshold 9.2.1.44		-	
>>Measurement Threshold 2	0		Measurement Threshold 9.2.1.44		_	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>>Report Periodicity	0		9.2.1.51a	The frequency with which the Node B shall send measurement reports.	_	
>Event F	1					
>>Measurement Threshold 1	M		Measurement Threshold 9.2.1.44		_	
>>Measurement Threshold 2	0		Measurement Threshold 9.2.1.44		_	
>>Measurement Hysteresis Time	0		9.2.1.41A		_	
>>Report Periodicity	0		9.2.1.51a	The frequency with which the Node B shall send	_	

				measurement reports.		
>Additional Report				See Note 1		
Characteristics						
>>On Modification						
>>>On		1			YES	reject
Modification						,
>>>Measurem	М		9.2.1.44		_	
ent Threshold						

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocolIE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

# 9.2.1.51a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity Scale	M			
>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	Criticality	Assigned Criticality
DGPS Corrections	0		9.2.1.24B		_	
GPS Navigation Model & Time	0		9.2.1.31B		_	
Recovery						
GPS Ionospheric	0		9.2.1.31C		_	
Model	O		3.2.1.310			
GPS UTC Model	0		9.2.1.31D			
GPS Almanac	0		9.2.1.31F		_	
GPS Real-Time	0		9.2.1.31E		_	
Integrity	Ü		0.2.1.012			
GPS RX Pos	0		9.2.1.31G		_	
GANSS Common		01	0.2		YES	ignore
Data		0			0	.9
>GANSS	0		9.2.1.91		_	
Ionospheric	,					
Model						
>GANSS RX Pos	0		9.2.1.95		_	
>GANSS	0		9.2.1.91a		YES	ignore
Additional					-	J
Ionospheric						
Model						
>GANSS Earth	0		9.2.1.107a		YES	ignore
Orientation						Ü
Parameters						
GANSS Generic		0 <max< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></max<>			GLOBAL	ignore
Data		NoGAN SS>				-
>GANSS ID	0		9.2.1.104		_	
>DGANSS	0		9.2.1.88		_	
Corrections						
>GANSS	0		9.2.1.105		_	
Navigation Model						
And Time						
Recovery						
>GANSS Time	0		9.2.1.96		-	
Model						
>GANSS UTC	0		9.2.1.97		_	
Model						
>GANSS	0		9.2.1.89		_	
Almanac	_					
>GANSS Real	0		9.2.1.94		-	
Time Integrity						
>GANSS Data Bit	0		9.2.1.103		_	
Assistance			0.04.00		1/50	
>GANSS	0		9.2.1.96a		YES	ignore
Additional Time						
Models			0.04.405-		VEO	i
>GANSS	0		9.2.1.105a		YES	ignore
Additional						
Navigation Models And Time						
Recovery						
>GANSS	0		9.2.1.97a	+	YES	ignore
Additional UTC	0		3.2.1.3/d		153	ignore
Models			9.2.1.107c	+	YES	ignore
Models >GANSS	$\circ$				1 1 1 2	IGHULE
>GANSS	0		9.2.1.1076		0	3
>GANSS Auxiliary	0		9.2.1.1076		. = 0	3
>GANSS	O C-GANSS-		9.2.1.107b		YES	ignore

Condition	Explanation
GANSS-ID	This IE shall be present if the GANSS ID IE indicates 'SBAS'.

Range Bound	Explanation
maxNoGANSS	Maximum number of GANSS Systems

## 9.2.1.51B Requested Data Value Information

The Requested Data Value Information IE provides information on whether or not the Requested Data Value is available in the message and also the Requested Data Value itself if available. In case of "Periodic" and "On Modification" reporting, "Information Not Available" shall be used when at least one part of the requested information was not available at the moment of initiating the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Availability Indicator	M			
>Information Available				
>>Requested Data Value	M		9.2.1.51A	
>Information Not Available			NULL	

## 9.2.1.52 Resource Operational State

The Resource Operational State is used to indicate the current operational state of the associated resource following a Node B failure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Resource Operational State			ENUMERATED ( Enabled, Disabled)	When a resource is marked as disabled, then its child resources are implicitly disabled. Cell Resource hierarchy can be referred to [6].

# 9.2.1.52A Retention Priority

Void.

#### 9.2.1.52B RLC Mode

The RLC Mode IE indicates the RLC Mode used for a Priority Queue.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
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)	

# 9.2.1.53b RTWP\* Reporting Indicator

The RTWP\* Reporting Indicator indicates if the RTWP\* measurement value shall be included together with the reported RSEPS measurement value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RTWP* Indicator			ENUMERATED ( RTWP* Reporting	
			Required)	

# 9.2.1.53c RTWP\* for Cell Portion Reporting Indicator

The RTWP\* for Cell Portion Reporting Indicator indicates if the RTWP\* for Cell Portion measurement value shall be included together with the reported RSEPS measurement value.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
RTWP* per Cell Portion			ENUMERATED (	
Indicator			RTWP* for Cell	
			Portion Reporting	
			Required)	

#### 9.2.1.53A SFN

System Frame Number of the cell, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			INTEGER (04095)	

# 9.2.1.53B Segment Type

Segment type as defined in [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Segment Type			ENUMERATED ( First segment, First segment short, Subsequent segment, Last segment, Last segment short, Complete SIB, Complete SIB short,)	

## 9.2.1.53C SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN-SFN Change Limit	0		INTEGER(1256)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit: chip Step: 1/16 chip
Predicted SFN-SFN Deviation Limit	0		INTEGER(1256)	Deviation of the predicated SFN-SFN from the latest measurement result, which shall trigger a new report. Unit: chip Step: 1/16 chip

# 9.2.1.53D SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN	М		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	М		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	М		9.2.3.23	Indicates the Time Slot of the reference cell at which this measurement has been performed.

#### 9.2.1.53E SFN-SFN Measurement Value Information

The *SFN-SFN Measurement Value Information* IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		1 <maxno MeasNCell &gt;</maxno 		
>UC-ld	M		9.2.1.65B	
>SFN-SFN Value	М		9.2.1.53F	
>SFN-SFN Quality	0		INTEGER (0255)	Indicates the standard deviation (std) of the SFN-SFN Observed Time Difference measurements in 1/16 chip. SFN-SFN Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Value, where x is the reported SFN-SFN Value and $\mu = E[x]$ is the expectation value of x.
>SFN-SFN Drift Rate	М		INTEGER (-100+100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	0		INTEGER (0100)	Indicates the standard deviation (std) of the SFN-SFN drift rate measurements in 1/256 chip per second. SFN-SFN Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Drift Rate, where x is the reported SFN-SFN Drift Rate and $\mu = E[x]$ is the expectation value of x.
>SFN-SFN Measurement Time Stamp	М		9.2.1.53D	
Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information		0 <maxno MeasNCell -1&gt;</maxno 		
>UC-Id	М		9.2.1.65B	

Range Bound	Explanation				
maxnoMeasNCell	Maximum number of neighbouring cells that can be measured on				

# 9.2.1.53F SFN-SFN Value

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN-SFN	М		INTEGER (0614399)	According to mapping in [22].
>TDD				1.28 Mcps and 3.84 Mcps only
>>SFN-SFN	M		INTEGER (040961)	According to mapping in [23].
>TDD 7.68 Mcps				
>>SFN-SFN	M		INTEGER (081923)	According to mapping in [23].

# 9.2.1.53G RL Specific DCH Information

The *RL Specific DCH Information* IE provides RL specific DCH Information for DCHs. In the case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE shall be included only for one of the DCHs in the set of co-ordinated DCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RL Specific DCH Information		1 <maxno ofDCHs&gt;</maxno 			_	
>DCH ID	M		9.2.1.20		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Bearer Not Requested Indicator	0		9.2.2.4G	FDD Only	YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

## 9.2.1.53H Scheduling Priority Indicator

Indicates the relative priority of the HS-DSCH [FDD - or E-DCH data frame]. Used by the Node B when scheduling HS-DSCH[FDD - or E-DCH].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scheduling Priority Indicator			INTEGER (015)	Relative priority of the HS-DSCH [FDD - or E-DCH data frame]:  "0" =Lowest Priority  "15" =Highest Priority

# 9.2.1.53I SID

The SID IE provides the identity of the Size Index.

	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SI	D			INTEGER (07)	

## 9.2.1.54 SIB Deletion Indicator

Void.

## 9.2.1.55 SIB Originator

Indicates if the Node B shall fill in the SIB information or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIB Originator			ENUMERATED ( Node B, CRNC,)	

## 9.2.1.55A Signalling Bearer Request Indicator

The Signalling Bearer Request Indicator IE indicates if a new signalling bearer needs to be established for the control of Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Signalling Bearer Request			ENUMERATED	
Indicator			(Bearer Requested)	

# 9.2.1.56 Shutdown Timer

The shutdown timer shall indicate the length of time available to the CRNC to perform the block of a resource when a Normal priority block is requested.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Shutdown Timer			INTEGER (13600)	Unit: second

#### 9.2.1.56a T1

The T1 IE is used as described in ref [32] subclause 11.6.2.3.

	IE/Group Name	Presence	Range	IE type and reference	Semantics description
T1				ENUMERATED (10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 120, 140, 160, 200, 300, 400,)	Unit: ms Node B may use this value to stop the re-transmission of the corresponding MAC-hs PDU.

## 9.2.1.56A T\_RLFAILURE

The Radio Link Failure procedure shall be triggered after a period of time T\_RLFAILURE has elapsed with a persisting out-of-sync indication (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T_RLFAILURE			INTEGER (0255)	Unit: second
				Range: 0 25.5 s Step: 0.1 s

# 9.2.1.56B Start Of Audit Sequence Indicator

Indicates if the AUDIT REQUEST message initiates a new audit sequence or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Start Of Audit Sequence			ENUMERATED (	
Indicator			Start Of Audit	
			Sequence,	
			Not Start Of Audit	
			Sequence)	

# 9.2.1.56C TFCI2 Bearer Request Indicator

Void.

#### 9.2.1.57 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. [TDD - If it is present in the timeslot, it will be mapped to the channelisation code defined by [19].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI presence			ENUMERATED (	
			Present,	
			Not Present)	

# 9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TFCS Values	M			
>Always Used				This choice is always made.
>>TFCS		1 <maxno ofTFCs&gt;</maxno 		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on.  [TDD - The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		9.2.1.18A	
>>>CHOICE Gain Factors	C- PhysChan			
>>>Signalled Gain Factors				
>>>>CHOICE Mode	M			
>>>>FDD				
>>>>>Gain Factor βc	М		INTEGER (015)	For UL DPCCH or control part of PRACH; mapping in accordance to [9]
>>>>>Gain Factor β <sub>D</sub>	M		INTEGER (015)	For UL DPDCH or data part of PRACH: mapping in accordance to [9]
>>>>TDD				
>>>>Gain Factor β	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	M		INTEGER (03)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>Not Used				This choice shall never be made by the CRNC and the Node B shall consider the procedure as failed if it is received.

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH
	channel.

Range Bound	Explanation
maxnoofTFCs	The maximum number of Transport Format Combinations

## 9.2.1.58A TNL QoS

This IE indicates the TNL QoS characteristics of the transport bearer for the uplink data traffic.

When the DS Field IE is used, the value of this IE is configurable by the operator.

When the *Generic Traffic Category* IE is used, generic traffic categories are implementation-specific (e.g. they may be determined by the sender from the application parameters). The value assigned to each of these categories and sent in the *Generic Traffic Category* IE is configurable by the operator, as well as the mapping of this value to DS field [35] at the Node B side.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
CHOICE TNL QoS type	М			
>DS Field				
>>DS Field	M		BIT STRING (8)	DS Field as defined in [35]. Typically used when the Node B and its CRNC are in the same DS domain as defined in [36].
>Generic Traffic Category				
>>Generic Traffic Category	M		BIT STRING (8)	

# 9.2.1.59 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

[TDD - The Transport Format Set for each transport channel within the same CCTrCH shall have the same value for the  $2^{nd}$  Interleaving Mode IE.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dynamic Transport Format Information		1 <maxtf count&gt;</maxtf 		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	M		INTEGER (0512)	
>Transport Block Size	C-Blocks		INTEGER (05000)	Unit: Bits
>CHOICE Mode	М			
>>TDD				
>>>Transmission Time Interval Information	C- TTldynami c	1 <maxtt Icount&gt;</maxtt 		
>>>Transmission Time Interval	М		ENUMERATED (10, 20, 40, 80,)	Unit: ms
Semi-Static Transport Format Information		1		
>Transmission Time Interval	М		ENUMERATED (10, 20, 40, 80, dynamic,,5)	Unit: ms; Value "dynamic' for TDD only; Value "5' for LCR TDD only; For FDD DCH, the value "80" is applicable only when <i>DL</i> <i>DPCH Slot Format</i> IE indicates a slot format with SF=512.
>Type Of Channel Coding	М		ENUMERATED ( No codingTDD, Convolutional, Turbo,)	[FDD - The value "No codingTDD" shall be treated as logical error if received]
>Coding Rate	C-Coding		ENUMERATED (1/2, 1/3,)	
>Rate Matching Attribute	М		INTEGER (1maxRM)	
>CRC Size	М		ENUMERATED (0, 8, 12, 16, 24,)	
>CHOICE Mode	М			
>>TDD				
>>>2 <sup>nd</sup> Interleaving Mode	М		ENUMERATED ( Frame related, Timeslot related,)	

Condition	Explanation
Blocks	The IE shall be present if the Number Of Transport Blocks IE is set to
	a value greater than 0.
Coding	The IE shall be present if the Type Of Channel Coding IE is set to
	"Convolutional" or "Turbo".
TTldynamic	The IE shall be present if the Transmission Time Interval IE in the
-	Semi-Static Transport Format Information IE is set to "dynamic'.

Range Bound	Explanation				
maxTFcount	Maximum number of different Transport Formats that can be included				
	in the Transport Format Set for one transport channel				
maxRM	Maximum number that could be set as rate matching attribute for a				
	transport channel				
maxTTlcount	The amount of different TTIs that are possible for that Transport				
	Format				

#### 9.2.1.60 ToAWE

TOAWE is the window endpoint. DL data frames are expected to be received before this window endpoint. TOAWE is defined with a positive value relative Latest Time of Arrival (LTOA). A data frame arriving after TOAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWE			INTEGER (02559)	Unit: ms

#### 9.2.1.61 ToAWS

TOAWS is the window startpoint. DL data frames are expected to be received after this window startpoint. TOAWS is defined with a positive value relative Time of Arrival Window Endpoint (TOAWE). A data frame arriving before TOAWS gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWS			INTEGER (01279)	Unit: ms

# 9.2.1.62 Transaction ID

The transaction ID is used to associate all the messages belonging to the same procedure. Messages belonging to the same procedure shall use the same transaction ID.

The transaction ID is determined by the initiating peer of a procedure. For common procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and signalled over the same Node B Control Port. For dedicated procedures the transaction ID shall uniquely identify a procedure within all ongoing parallel procedures initiated by one protocol peer, using the same procedure code and initiated towards the same Node B/CRNC context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Transaction ID Length				The Transaction ID shall be interpreted for its integer value, not for the type of encoding ("short" or "long").
>Short				
>>Transaction ID Value	M		INTEGER (0127)	
>Long				
>>Transaction ID Value	М		INTEGER (032767)	

# 9.2.1.62A Transport Bearer Request Indicator

Indicates whether a new transport bearer needs to be established for carrying the concerned transport channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request Indicator			ENUMERATED ( Bearer Requested, Bearer Not Requested,)	

# 9.2.1.63 Transport Layer Address

In case of transport bearer establishment with ALCAP [2][31], this IE contains the address to be used for Transport Network Control Plane signalling to establish the transport bearer according to [2][31].

In order to allow transport bearer establishment without ALCAP, this IE contains the address of the transport bearer to be used for the user plane transport.

For details on the Transport Address used see ref. [2][31].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			BIT STRING (1160,	
			)	

#### 9.2.1.64 TSTD Indicator

Indicates if TSTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Indicator			ENUMERATED (	
			active,	
			inactive)	

# 9.2.1.64A T<sub>UTRAN-GPS</sub> Measurement Value Information

The T<sub>UTRAN-GPS</sub> *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frames for UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tutran-gps		1		Indicates the UTRAN GPS Timing of Cell Frames forUE Positioning. According to mapping in [22]. Significant values range from 0 to 37158911999999.
>MS	М		INTEGER (016383)	Most Significant Part
>LS	М		INTEGER (04294967295)	Least Significant Part
T <sub>UTRAN-GPS</sub> Quality	0		INTEGER (0255)	Indicates the standard deviation (std) of the T <sub>UTRAN-GPS</sub> measurements in 1/16 chip. $T_{UTRAN-GPS}$ Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported T <sub>UTRAN-GPS</sub> Value, where x is the reported T <sub>UTRAN-GPS</sub> Value and $\mu = E[x]$ is the expectation value of x.
T <sub>UTRAN-GPS</sub> Drift Rate	M		INTEGER (-50+50)	Indicates the T <sub>UTRAN-GPS</sub> drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
T <sub>UTRAN-GPS</sub> Drift Rate Quality	0		INTEGER (050)	Indicates the standard deviation (std) of the T <sub>UTRAN-GPS</sub> drift rate measurements in 1/256 chip per second.  T <sub>UTRAN-GPS</sub> Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported T <sub>UTRAN-GPS</sub> Drift Rate, where x is the reported T <sub>UTRAN-GPS</sub> Drift Rate and $\mu = E[x]$ is the expectation value of x.

# 9.2.1.64B T<sub>UTRAN-GPS</sub> Measurement Threshold Information

The  $T_{UTRAN-GPS}$  Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frames for UE Positioning measurements shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tutran-gps Change Limit	0		INTEGER (1256)	Change of T <sub>UTRAN-GPS</sub> value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T <sub>UTRAN-GPS</sub> Deviation Limit	0		INTEGER (1256)	Deviation of the predicated T <sub>UTRAN-GPS</sub> from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

# 9.2.1.64C T<sub>UTRAN-GPS</sub> Accuracy Class

The  $T_{UTRAN-GPS}$  Accuracy Class IE indicates the accuracy class of the UTRAN GPS Timing of Cell Frames for UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
T <sub>UTRAN-GPS</sub> Accuracy Class			ENUMERATED (	More information about T <sub>UTRAN</sub> -
			Accuracy Class A,	GPS Measurement Accuracy
			Accuracy Class B,	Class is included in [22] and
			Accuracy Class C,	[23].
			)	

#### 9.2.1.65 UARFCN

Designates the carrier frequency.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER (016383,)	As defined in subclause 5.4.3 in [14] and [15]

# 9.2.1.65A UL Capacity Credit

The capacity credit indicates to the CRNC the Uplink capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Capacity Credit			INTEGER (065535)	

# 9.2.1.65B UTRAN Cell Identifier (UC-Id)

The UC-Id (UTRAN Cell identifier) is the identifier of a cell in one UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RNC-ld	M		9.2.1.53a	If the Extended RNC-ID IE is included in the UC- Id IE, the RNC-Id IE shall be ignored.	-	_
C-Id	M		9.2.1.9		_	_
Extended RNC-ID	0		9.2.1.65C	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

## 9.2.1.65C Extended RNC-ID

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended RNC-ID			INTEGER(409665535)	Note: Application of the Extended RNC-ID IE to very large networks is FFS.

## 9.2.1.66 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL FP Mode			ENUMERATED (	
			Normal,	
			Silent,	
			)	

#### 9.2.1.67 UL interference level

Void.

#### 9.2.1.67A UL SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL SIR			INTEGER (-82173)	Value = UL SIR/10 Unit: dB Range: -8.2 +17.3 dB Step: 0.1 dB

#### 9.2.1.68 Unidirectional DCH Indicator

The *Unidirectional DCH Indicator* IE indicates that the DCH is unidirectional.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Unidirectional DCH Indicator			ENUMERATED	
			(Downlink DCH only,	
			Uplink DCH only)	

# 9.2.1.69 E-DCH MAC-d Flow Multiplexing List

The E-DCH MAC-d Flow Multiplexing List indicates which E-DCH MAC-d flows are allowed to be multiplexed within a MAC-e PDU with the MAC-d flow it is associated to. If the E-DCH MAC-d Flow Multiplexing List is signalled for an E-DCH MAC-d flow it indicates that E-DCH MAC-d PDUs of this E-DCH MAC-d flow are the first E-DCH MAC-d PDU in the MAC-e PDU. If an E-DCH MAC-d Flow Multiplexing List was already received within a previous Radio Link related procedure and no E-DCH MAC-d Flow Multiplexing List is signalled for an E-DCH MAC-d flow, the Node B shall continue to use the previously received one. If no E-DCH MAC-d Flow Multiplexing List was ever received for an E-DCH MAC-d flow no restrictions shall be assumed for the related E-DCH MAC-d flow for multiplexing E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-DCH MAC-d Flow Multiplexing List			BIT STRING (8)	The first Bit corresponds to E-DCH MAC-d flow 0, the second bit corresponds to E-DCH MAC-d flow 1, etc.

## 9.2.1.70 E-DCH Capability

This parameter defines the E-DCH capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Capability			ENUMERATED (E-	
			DCH Capable, E-	
			DCH non Capable)	

## 9.2.1.71 E-DCH Logical Channel Information

The *E-DCH Logical Channel Information* IE is used for the establishment of E-DCH Logical Channels.

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
E-DCH Logical Channel Information		1 <maxnoofl ogicalchanne ls&gt;</maxnoofl 			-	
>Logical Channel ID	M		9.2.1.80		ı	
>Scheduling Priority Indicator	M		9.2.1.53H		1	
>Scheduling Information	M		9.2.1.84		ı	
>MAC-es Guaranteed Bit Rate	0		9.2.1.82		1	
>E-DCH DDI Value	M		9.2.1.76	If more than 1 MAC-d PDU size is configured for this Logical Channel, the different sizes will use subsequent DDI values starting from this DDI value. Value '0x3F' is reserved		
>MAC-d PDU Size List		1 <maxnoof MACdPDUSi ze&gt;</maxnoof 			I	
>>MAC-d PDU Size	М		9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	reject

Range Bound	Explanation			
Maxnooflogicalchannels	Maximum number of logical channels			
maxnoofMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels			

# 9.2.1.72 E-DCH Logical Channel To Modify

The E-DCH Logical Channel To Modify IE is used for the reconfiguration of E-DCH Logical Channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Logical Channel Information		1 <maxno oflogicalch annels&gt;</maxno 			I	
>Logical Channel ID	M		9.2.1.80		1	
>Scheduling Priority Indicator	0		9.2.1.53H		I	
>Scheduling Information	0		9.2.1.84		_	
>MAC-es Guaranteed Bit Rate	0		9.2.1.82		ı	
>E-DCH DDI Value	0		9.2.1.76	If more than 1 MAC-d PDU size is configured for this Logical Channel, the different sizes will use subsequent DDI values starting from this DDI value. Value '0x3F' is reserved	-	
>MAC-d PDU Size List		0< maxnoofM ACdPDUS ize			_	
>>MAC-d PDU Size	М		9.2.1.38A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C		YES	reject

Range Bound	Explanation
maxnooflogicalchannels	Maximum number of logical channels
maxnoofMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels

# 9.2.1.73 E-DCH MAC-d Flows To Delete

The *E-DCH MAC-d Flows To Delete* IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flows To Delete		1 <maxno ofEDCHM ACdFlows &gt;</maxno 		
>E-DCH MAC-d Flow ID	M		9.2.1.74	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

# 9.2.1.74 E-DCH MAC-d Flow ID

The E-DCH MAC-d Flow ID is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow ID			INTEGER	
			(0maxnoofEDCHM	
			ACdFlows - 1)	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

#### 9.2.1.74A E-DCH MAC-d PDU Size Capability

This parameter defines the capability for a Local Cell to support different MAC-d PDU Size formats. If this IE is set to "Flexible Size Capable" the Local Cell is "Fixed Size Capable" and "Flexible Size Capable". If not present or set to "Fixed Size Capable" the Local Cell is only "Fixed Size Capable".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d PDU Size			ENUMERAT	
Capability			ED (Fixed	
			Size	
			Capable,	
			Flexible Size	
			Capable)	

## 9.2.1.74B E-DCH MAC-d PDU Size Format

The *E-DCH MAC-d PDU Size Format* IE provides information about the type of MAC-d PDU Size Format that shall be used for the E-DCH in the new configuration. "Fixed MAC-d PDU Size" uses MAC-d PDU sizes defined in *MAC-d PDU Size List* IE of the *E-DCH Logical Channel Information* IE. "Flexible MAC-d PDU Size" uses a flexible MAC-d PDU size with a maximum PDU size as defined by *Maximum MAC-d PDU Size Extended* IE of *E-DCH Logical Channel Information* IE. The actual MAC-d PDU size is determined as specified in [24] and [32].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-DCH MAC-d PDU Size			ENUMERATED	
Format			(Fixed MAC-d PDU	
			Size, Flexible MAC-d	
			PDU Size)	

#### 9.2.1.75 E-RNTI

The E-RNTI is needed for the UE (or UE group) specific CRC in E-AGCH, see ref. [38].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI			INTEGER	
			(065535)	

#### 9.2.1.76 E-DCH DDI Value

The E-DCH DDI Value is the Data Description Indicator value identifying a unique combination of E-DCH MAC-d Flow ID and MAC-d PDU Size.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH DDI Value			INTEGER (062)	

#### 9.2.1.77 E-DCH Provided Bit Rate Value

The E-DCH Provided Bit Rate Value IE indicates the E-DCH Provided Bit Rate as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Provided Bit Rate Value			INTEGER (02^24-1,,	Expressed in bit/s.
			2^24256,000,000)	

#### 9.2.1.78 E-DCH Provided Bit Rate Value Information

The E-DCH Provided Bit Rate Value Information IE reports the E-DCH Provided Bit Rate Value IE for each priority class

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Provided Bit Rate		1 <maxno< th=""><th></th><th></th></maxno<>		
Value Information		ofPriorityCl		
		asses>		
>Scheduling Priority Indicator	M		9.2.1.53H	
>E-DCH Provided Bit Rate	M		9.2.1.77	
Value				

Range Bound	Explanation
maxNoofPriorityClasses	Maximum number of E-DCH Scheduling Priorities

## 9.2.1.79 E-DCH Processing Overload Level

The *E-DCH Processing Overload Level* IE defines the threshold that determines when the Node B shall indicate processing issue problems to the RNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
E-DCH Processing Overload Level			INTEGER (010,)	Number of consecutive TTIs. The value "0" is a special value that means infinity, i.e. when this value is used, the Node B shall never indicate processing issue to the RNC.

## 9.2.1.80 Logical channel ID

The Logical Channel ID IE is used to identify a E-DCH logical channel in Sheduling Information that is sent over Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Logical Channel ID			INTEGER (115)	

#### 9.2.1.81 Maximum Number Of Retransmissions For E-DCH

The *Maximum Number Of Retransmissions For E-DCH* IE specifies the upper boundary for retransmissions for a single MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number Of			INTEGER	
Retransmissions For E-DCH			(015)	

#### 9.2.1.82 MAC-es Guaranteed Bit Rate

The MAC-es Guaranteed Bit Rate IE indicates the guaranteed number of bits per second to be delivered over the air interface under normal operating conditions (provided there is data to deliver) for which the Node B shall provide sufficient UL resources. If the MAC-es Guaranteed Bit Rate IE is received with the value set to 0 during RL set up or modification, no guarantee is applied.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-es Guaranteed Bit Rate			INTEGER (02^24-	Unit: bit/s
			1,,	
			2^24256,000,000)	

#### 9.2.1.83 MAC-e Reset Indicator

Indicates the MAC-e Reset is performed in UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-e Reset Indicator			ENUMERATED	
			(MAC-e Reset)	

# 9.2.1.84 Scheduling Information

The Scheduling Information IE indicates whether the scheduling information is included for the E-DCH logical channel or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scheduling Information			ENUMERATED (	
_			Included,	
			Not Included)	

# 9.2.1.85 E-DCH Power Offset for Scheduling Info

The *E-DCH Power Offset for Scheduling Info* is used to calculate the [FDD - E-DPDCH][TDD - E-PUCH] power for transmision of scheduling information without any MAC-d PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Power Offset for			INTEGER (06)	Unit: dB
Scheduling Info				Step: 1 dB

#### 9.2.1.86 MBMS Capability

This parameter defines the MBMS capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBMS Capability			ENUMERATED	
			(MBMS Capable,	
			MBMS non Capable)	

#### 9.2.1.87 Modulation

Indicates the modulation to be used for a S-CCPCH CCTrCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Modulation			ENUMERATED (	
			QPSK,	
			16QAM,)	

# 9.2.1.88 DGANSS Corrections

This IE contains DGANSS corrections.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
DGANSS Reference Time	М		INTEGER(0. .3570 by step of 30)	Seconds. Time in GNSS system time (modulo 3600 s) when the DGANSS corrections were calculated
DGANSS Information		1 to <maxsgnt ype&gt;</maxsgnt 		
>GANSS Signal ID >Status/Health	O M		9.2.1.106  ENUMERAT ED(UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.2, UDRE scale 0.1, no data, invalid data)	
>DGANSS Signal Information	C- Status/Hea Ith	1 to <maxgan SSSat&gt;</maxgan 		If the Cipher information is included these fields are ciphered.
>>Sat ID	M		INTEGER(063)	Defined in [18].
>>IOD	M		BIT STRING(10)	
>>UDRE	M		ENUMERAT ED(UDRE \le 1.0 m, 1.0m < UDRE \le 4.0m, 4.0m < UDRE \le 8.0m, 8.0m < UDRE)	The value in this field shall be multiplied by the UDRE Scale Factor in the IE Status/Health to determine the final UDRE estimate for the particular satellite.
>>PRC	М		INTEGER(- 20472047)	Scaling factor 0.32 meters
>>RRC	М		INTEGER(- 127127)	Scaling factor 0.032 meters/sec

Condition	Explanation
Status/Health	This IE shall be present if the Status/Health IE value
	is not equal to "no data" or "invalid data".

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE
maxSgnType	Maximum number of signals for which data is included in the IE

## 9.2.1.89 GANSS Almanac

This IE contains a reduced-precision subset of the ephemeris and clock correction parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
Week Number	M		INTEGER(0255)	Almanac reference week , number of weeks since the beginning of GANSS specific system time (mod 256)
CHOICE Almanac Model	M			
>Keplerian Parameters				Model 1
>>T <sub>oa</sub>	M		INTEGER(0255)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base
>>IOD <sub>a</sub>	M		INTEGER(03)	Issue-Of –Data, common to all satellites
>>Satellite Information KP		1 to <maxgan SSSatAlm anac&gt;</maxgan 		Almanacs are in the order of the SV IDs, the smallest ID first.
>>>Sat ID	M		INTEGER(063)	Defined in [18].
>>>e	М		BIT STRING(11)	Eccentricity, dimensionless [39]
>>>δί	М		BIT STRING(11)	semi-circles [39]
>>>OMEGADOT	М		BIT STRING(11)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles/sec) [39]
>>>SV Health KP	M		BIT STRING(4)	dimensionless
>>>delta A <sup>1/2</sup>	M		BIT STRING(17)	Semi-Major Axis delta (meters) 1/2 [39]
>>>OMEGA <sub>0</sub>	М		BIT STRING(16)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) [39]
>>>M <sub>0</sub>	М		BIT STRING(16)	Mean Anomaly at Reference Time (semi-circles) [39]
>>>0	М		BIT STRING(16)	Argument of Perigee (semi-circles) [39]
>>>af <sub>0</sub>	M		BIT STRING(14)	Seconds [39]
>>>af <sub>1</sub>	М		BIT STRING(11)	sec/sec [39]
>NAV Keplerian Parameters				Model 2
>>T <sub>oa</sub>	M		INTEGER(0255)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base
>>Satellite information NAV-KP		1 <maxgan SSSatAlm anac&gt;</maxgan 		
>>>Sat ID	М		INTEGER (063)	Defined in [18].
>>>e	M		BIT STRING(16)	Eccentricity, dimensionless [47]
>>>δi	M		BIT STRING (16)	Correction to inclination, semi-circles [47]
>>>OMEGADOT	M		BIT STRING (16)	Rate of right ascension, semi-circles/sec [47]
>>>SV Health	М		BIT STRING (8)	Satellite health [47]
>>>A <sup>1/2</sup>	M		BIT STRING (24)	Square root of the semi-major axis,

	1	1	ı	I no ada ya 1/2 [4.7]
>>>OMEGA <sub>0</sub>	M		BIT STRING	meters <sup>1/2</sup> [47] Longitude of ascending node
>>>OIVIEGA0	IVI		(24)	of orbit plane at weekly epoch, semi-circles [47]
>>>(i)	М		BIT STRING (24)	Argument of perigee semi-circles [47]
>>>M <sub>0</sub>	М		BIT STRING (24)	Mean anomaly at reference time
			` ,	semi-circles [47]
>>>af <sub>0</sub>	M		BIT STRING (11)	Apparent satellite clock correction seconds [47]
>>>af <sub>1</sub>	M		BIT STRING (11)	Apparent satellite clock correction
				sec/sec [47]
>Reduced Keplerian Parameters				Model 3
>>T <sub>oa</sub>	M		INTEGER(0.	Scaling factor 2 <sup>12</sup> s
>> 1 0a	IVI		.255)	Reference time of almanac within week in GANSS TOD time base
>>Satellite information RED-KP		1 <maxgan SSSatAlm anac&gt;</maxgan 		
>>>Sat ID	M	anac>	INTEGER	Defined in [18].
777 Gat 12	***		(063)	
>>>δ <sub>A</sub>	М		BIT STRING(8)	meters [43,44,45,47]
>>>\Omega_0	М		BIT STRING (7)	semi-circles [43,44,45,47]
>>>Φ <sub>0</sub>	М		BIT STRING (7)	semi-circles [43,44,45,47]
>>>L1 Health	М		BIT STRING (1)	dimensionless [43,44,45,47]
>>>L2 Health	М		BIT STRING (1)	dimensionless [43,44,45,47]
>>>L5 Health	М		BIT STRING (1)	dimensionless [43,44,45,47]
>Midi Keplerian Parameters				Model 4
>>T <sub>oa</sub>	M		INTEGER(0255)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base
>>Satellite information MIDI-KP		1 <maxgan SSSatAlm anac&gt;</maxgan 		
>>>Sat ID	М		INTEGER (063)	Defined in [18].
>>>e	М		BIT STRING(11)	dimensionless [43,44,45,47]
>>>δ <sub>i</sub>	М		BIT STRÌNG (11)	semi-circles [43,44,45,47]
>>>Ω_dot	М		BIT STRING (11)	semi-circles/sec [43,44,45,47]
>>>sqrtA	М		BIT STRING (17)	meters <sup>1/2</sup> [43,44,45,47]
$>>>\Omega_0$	М		BIT STRING (16)	semi-circles [43,44,45,47]
>>>(i)	М		BIT STRING (16)	semi-circles [43,44,45,47]
>>>M <sub>0</sub>	M		BIT STRING (16)	semi-circles [43,44,45,47]
>>>a <sub>fo</sub>	M		BIT STRING (11)	seconds [43,44,45,47]
>>>a <sub>f1</sub>	M		BIT STRING	sec/sec [43,44,45,47]

Г			(4.0)	T
>>>L1 Health	M		(10) BIT STRING	Dimensionless [43,44,45,47]
>>>L2 Health	M		(1) BIT STRING	dimensionless [43,44,45,47]
			(1)	
>>>L5 Health	М		BIT STRING (1)	dimensionless [43,44,45,47]
>GLONASS Keplerian Parameters				Model 5
>>Satellite information GLO-KP		1 <maxgan SSSatAlm anac&gt;</maxgan 		
>>>N <sup>A</sup>	М		BIT STRING(11)	days [48]
>>>n <sup>A</sup>	М		BIT STRING (5)	dimensionless [48]
>>>H <sub>n</sub> <sup>A</sup>	М		BIT STRING (5)	dimensionless [48]
>>>\hat{\lambda}_n^A	М		BIT STRING (21)	semi-circles [48]
>>>t,n <sup>A</sup>	М		BIT STRING (21)	seconds [48]
>>>∆i <sub>n</sub> <sup>A</sup>	М		BIT STRING (18)	semi-circles [48]
>>>∆T <sub>n</sub> <sup>A</sup>	М		BIT STRING (22)	sec/orbit period [48]
>>>ΔT_DOT <sub>n</sub> <sup>A</sup>	М		BIT STRING (7)	sec/orbit period <sup>2</sup> [48]
>>>ε <sub>n</sub> <sup>A</sup>	М		BIT STRING (15)	dimensionless [48]
>>>\omega_n^A	М		BIT STRING (16)	semi-circles [48]
>>>\tau_n^A	М		BIT STRING (10)	seconds [48]
>>>C <sub>n</sub> <sup>A</sup>	М		BIT STRING (1)	dimensionless [48]
>>>M <sub>n</sub> <sup>A</sup>	0		BIT STRING (2)	dimensionless [48]
>SBAS ECEF Parameters				Model 6
>>Satellite information SBAS-ECEF		1 <maxgan SSSatAlm anac&gt;</maxgan 		
>>>Data ID	М		BIT STRING(2)	Dimensionless [46]
>>>SV ID	М		INTEGER (063)	Defined in [18].
>>>Health	М		BIT STRING (8)	Dimensionless [46]
>>>X <sub>G</sub>	М		BIT STRING (15)	meters [46]
>>>Y <sub>G</sub>	М		BIT STRING (15)	meters [46]
>>>Z <sub>G</sub>	М		BIT STRING (9)	meters [46]
>>>X <sub>G</sub> Rate-of-Change	М		BIT STRING (3)	meters/sec [46]
>>>Y <sub>G</sub> Rate-of-Change	М		BIT STRING (3)	meters/sec [46]
>>>Z <sub>G</sub> Rate-of-Change	М		BIT STRING (4)	meters/sec [46]
>>>t <sub>0</sub>	М		BIT STRING (11)	seconds [46]

Range Bound	Explanation
maxGANSSSatAlmanac	Maximum number of satellites for which data is included in the IE

# 9.2.1.90 GANSS Clock Model

The IE contains fields needed to model the GANSS clock parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
Satellite Clock Model		1 to <maxgan SSClockM od&gt;</maxgan 		Model -1 There may be more than one clock model included if defined in SIS ICD (e.g. two for Galileo)
>t <sub>oc</sub>	М		BIT STRING(14)	defined in [39]
>a <sub>i2</sub>	М		BIT STRING(12)	defined in [39]
>a <sub>i1</sub>	М		BIT STRING(18)	defined in [39]
>a <sub>i0</sub>	М		BIT STRING(28)	defined in [39]
>T <sub>GD</sub>	0		BIT STRING(10)	defined in [39]
>Model ID	0		INTEGER(01,)	Coded as defined in [18].

Range bound	Explanation
maxGANSSClockMod	Maximum number of satellite clock models for which data is included in the IE.

## 9.2.1.90a GANSS Additional Clock Models

The IE contains fields needed to model the GANSS clock parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional Clock Models				
>NAV-Clock Model				Model-2
>>t <sub>oc</sub>	М		BIT STRING(16)	Time of clock (seconds) [47]
>>af <sub>2</sub>	М		BIT STRING (8)	Clock correction polynomial coefficient (sec/sec²) [47]
>>af <sub>1</sub>	М		BIT STRING (16)	Clock correction polynomial coefficient (sec/sec) [47]
>>af <sub>0</sub>	М		BIT STRING (22)	Clock correction polynomial coefficient (seconds) [47]
>>T <sub>GD</sub>	М		BIT STRING (8)	Group delay (seconds) [47]
>CNAV/CNAV-2 Clock Model				Model-3
>>t <sub>oc</sub>	М		BIT STRING (11)	Clock data reference time of week (seconds) [43, 45, 45, 47]
>>t <sub>op</sub>	М		BIT STRING (11)	Clock data predict time of week (seconds) [43, 45, 45, 47]
>>URA <sub>oc</sub> Index	М		BIT STRING (5)	SV clock accuracy index (dimensionless) [43, 45, 45, 47]
>>URA <sub>oc1</sub> Index	М		BIT STRING (3)	SV clock accuracy change index (dimensionless) [43, 45, 45, 47]
>>URA <sub>oc2</sub> Index	M		BIT STRING (3)	SV clock accuracy change rate index (dimensionless) [43, 45, 45, 47]
>>a <sub>f2-n</sub>	М		BIT STRING (10)	SV clock drift rate correction coefficient (sec/sec <sup>2</sup> ) [43, 45, 45, 47]
>>a <sub>f1-n</sub>	М		BIT STRING (20)	SV clock drift correction coefficient (sec/sec) [43, 45, 45, 47]
>>a <sub>f0-n</sub>	М		BIT STRING (26)	SV clock bias correction coefficient (seconds) [43, 45, 45, 47]
>>T <sub>GD</sub>	М		BIT STRING (13)	Group delay correction (seconds) [43, 45, 45, 47]
>>ISC <sub>L1CP</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [45, 47]
>>ISC <sub>L1CD</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [45, 47]
>>ISCL1C/A	0		BIT STRING (13)	Inter signal group delay correction (seconds) [43, 44, 47]
>>ISC <sub>L2C</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [43, 44, 47]
>>ISC <sub>L5I5</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) [44, 47]
>>ISC <sub>L5Q5</sub>	0		BIT STRING	Inter signal group delay

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
			(13)	correction (seconds) [44, 47]
>GLONASS Satellite Clock Model				Model-4
$>\tau_n(t_b)$	М		BIT STRING (22)	Satellite clock offset (seconds) [48]
$>\gamma_n(t_b)$	М		BIT STRING (11)	Relative frequency offset from nominal value (dimensionless) [48]
>Δτ <sub>n</sub>	0		BIT STRING (5)	Time difference between transmission in G2 and G1 (seconds) [48]
>SBAS Satellite Clock Model				Model-5
>t <sub>0</sub>	М		BIT STRING (13)	(seconds) [46]
>a <sub>Gfo</sub>	М		BIT STRING (12)	(seconds) [46]
>a <sub>Gf1</sub>	М		BIT STRING (8)	(sec/sec) [46]

# 9.2.1.91 GANSS Ionospheric Model

The IE contains fields needed to model the propagation delays of the GANSS signals through the ionosphere.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
$a_{i0}$	М		BIT STRING(12)	This parameter is used as defined in [39]
a <sub>i1</sub>	М		BIT STRING(12)	This parameter is used as defined in [39]
a <sub>i2</sub>	М		BIT STRING(12)	This parameter is used as defined in [39]
GANSS Ionosphere Regional Storm Flags		01		
>Storm Flag 1	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 2	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 3	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 4	М		BOOLEAN	This parameter is used as defined in [39]
>Storm Flag 5	М		BOOLEAN	This parameter is used as defined in [39]

# 9.2.1.91a GANSS Additional Ionospheric Model

The IE contains fields needed to model the propagation delays of the GANSS signals through the ionosphere.

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	
Data ID	M		BIT	Coded as defined in [18]
			STRING(2)	
$\alpha_0$	M		BIT STRING	seconds [47]
			(8)	
$\alpha_1$	M		BIT STRING	sec/semi-circle [47]
			(8)	
$\alpha_2$	M		BIT STRING	sec/(semi-circle) <sup>2</sup> [47]
			(8)	
$\alpha_3$	M		BIT STRING	sec/(semi-circle) <sup>3</sup> [47]
			(8)	
$\beta_0$	M		BIT STRING	seconds [47]
•			(8)	
β <sub>1</sub>	M		BIT STRING	sec/semi-circle [47]
			(8)	
$\beta_2$	M		BIT STRING	sec/(semi-circle) <sup>2</sup> [47]
			(8)	
β <sub>3</sub>	M		BIT STRING	sec/(semi-circle) <sup>3</sup> [47]
			(8)	,

# 9.2.1.92 GANSS Navigation Model

Void.

## 9.2.1.93 GANSS Orbit Model

This IE contains information for GANSS orbit model parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Orbit Model	М			
>Keplerian Parameters				Model-1
>>t <sub>0e</sub>	М		BIT STRING(14)	Time-of-Ephemeris in seconds, scale factor 60 [39]
>>0	М		BIT STRING(32)	Argument of Perigee (semicircles) [39]
>>∆n	M		BIT STRING(16)	Mean Motion Difference From Computed Value (semi- circles/sec) [39]
>>M <sub>0</sub>	М		BIT STRING(32)	Mean Anomaly at Reference Time (semi-circles) [39]
>>OMEGAdot	М		BIT STRING(24)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles/sec) [39]
>>e	M		BIT STRING(32)	Eccentricity, scale factor 2 <sup>-33</sup> [39]
>>ldot	M		BIT STRING(14)	Rate of Inclination Angle (semi-circles/sec) [39]
>>sqrtA	М		BIT STRING(32)	Semi-Major Axis in (meters) <sup>1/2</sup> , scale factor 2 <sup>-19</sup> [39]
>>i <sub>0</sub>	M		BIT STRING(32)	Inclination Angle at Reference Time (semi-circles) [39]
>>OMEGA <sub>0</sub>	M		BIT STRING(32)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) [39]
>>C <sub>rs</sub>	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term to the Orbit Radius (meters) [39]
>>C <sub>is</sub>	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Angle Of Inclination (radians) [39]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C <sub>us</sub>	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Argument Of Latitude (radians) [39]
>>C <sub>rc</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term to the Orbit Radius (meters) [39]
>>C <sub>ic</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Angle Of Inclination (radians) [39]
>>C <sub>uc</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Argument Of Latitude (radians) [39]

# 9.2.1.93a GANSS Additional Orbit Models

This IE contains information for GANSS orbit model parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional Orbit Models				
>NAV-Keplerian Parameters				Model-2
>>URA Index	М		BIT STRING(4)	SV accuracy (dimensionless) [47]
>>Fit Interval Flag	M		BIT STRING (1)	Fit interval indication (dimensionless) [47]
>>t <sub>oe</sub>	М		BIT STRING(16)	Time of ephemeris (seconds) [47]
>>0	М		BIT STRING (32)	Argument of perigee (semi-circles) [47]
>>∆n	M		BIT STRING (16)	Mean motion difference from computed value (semi-circles/sec) [47]
>>M <sub>0</sub>	М		BIT STRING (32)	Mean anomaly at reference time (semi-circles) [47]
>>OMEGAdot	М		BIT STRING (24)	Rate of right ascension (semi-circles/sec) [47]
>>e	М		BIT STRING (32)	Eccentricity (dimensionless) [47]
>>ldot	М		BIT STRING (14)	Rate of inclination angle (semi-circles/sec) [47]
>>sqrtA	М		BIT STRING (32)	Square root of semi-major axis (meters <sup>1/2</sup> ) [47]
>>i <sub>0</sub>	М		BIT STRING (32)	Inclination angle at reference time (semi-circles) [47]
>>OMEGA <sub>0</sub>	М		BIT STRING (32)	Longitude of ascending node of orbit plane at weekly epoch (semi-circles) [47]
>>C <sub>rs</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the orbit radius (meters) [47]
>>C <sub>is</sub>	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) [47]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C <sub>us</sub>	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the argument of latitude (radians) [47]
>>C <sub>rc</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the orbit radius (meters) [47]
>>C <sub>ic</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) [47]
>>C <sub>uc</sub>	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) [47]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>CNAV/CNAV-2 Keplerian Parameters				Model-3
>>t <sub>op</sub>	М		BIT STRING (11)	Data predict time of week (seconds) [43,44,45,47]
>>URA <sub>oe</sub> Index	М		BIT STRING (5)	SV accuracy (dimensionless) [43,44,45,47]
>>∆A	M		BIT STRING (26)	Semi-major axis difference at reference time (meters) [43,44,45,47]
>>A_dot	M		BIT STRING (25)	Chane rate in semi-major axis (meters/sec) [43,44,45,47]
>>∆n <sub>0</sub>	M		BIT STRING (17)	Mean motion difference from computed value at reference time (semi-circles/sec) [43,44,45,47]
>>∆n <sub>0</sub> _dot	M		BIT STRING (23)	Rate of mean motion difference from computed value (semi-circles/sec <sup>2</sup> ) [43,44,45,47]
>>M <sub>0-n</sub>	M		Bit String(33)	Mean anomaly at reference time (semi-circles) [43,44,45,47]
>>e <sub>n</sub>	М		BIT STRING (33)	Eccentricity (dimensionless) [43,44,45,47]
>>\omega_n	M		Bit String(33)	Argument of perigee (semi-circles) [43,44,45,47]
>>Ω <sub>0-n</sub>	M		BIT STRING (33)	Reference right ascension angle (semi-circles) [43,44,45,47]
>>ΔΩ_dot	M		BIT STRING (17)	Rate of right ascension difference (semi-circles/sec) [43,44,45,47]
>>i <sub>o-n</sub>	M		BIT STRING (33)	Inclination angle at reference time (semi-circles) [43,44,45,47]
>>I <sub>0-n</sub> _dot	M		BIT STRING (15)	Rate of inclination angle (semi-circles/sec) [43,44,45,47]
>>C <sub>is-n</sub>	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) [43,44,45,47]
>>C <sub>ic-n</sub>	M		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) [43,44,45,47]
>>C <sub>rs-n</sub>	М		BIT STRING (24)	Amplitude of sine harmonic correction term to the orbit radius (meters) [43,44,45,47]
>>C <sub>rc-n</sub>	М		BIT STRING (24)	Amplitude of cosine harmonic correction term to the orbit radius (meters) [43,44,45,47]
>>C <sub>us-n</sub>	М		BIT STRING (21)	Amplitude of sine harmonic correction term to the argument of latitude (radians) [43,44,45,47]
>>C <sub>uc-n</sub>	M		BIT STRING (21)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) [43,44,45,47]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>GLONASS Earth-Centered, Earth-fixed Parameters				Model-4
>>E <sub>n</sub>	М		BIT STRING (5)	Age of data (days) [48]
>>P1	М		BIT STRING (2)	Time interval between two adjacent values of t <sub>b</sub> (minutes) [48]
>>P2	М		BIT STRING (1)	Change of t <sub>b</sub> flag (dimensionless) [48]
>>M	0		BIT STRING (2)	Type of satellite (dimensionless) [48]
$\Rightarrow x_n(t_b)$	М		BIT STRING (27)	x-coordinate of satellite at time t <sub>b</sub> (kilometers) [48]
$\Rightarrow \dot{x}_n(t_b)$	М		BIT STRING (24)	x-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [48]
$\Rightarrow \ddot{x}_n(t_b)$	М		BIT STRING (5)	x-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [48]
$\Rightarrow y_n(t_b)$	М		BIT STRING (27)	y-coordinate of satellite at time
$\Rightarrow \dot{y}_n(t_b)$	М		BIT STRING (24)	(kilometers) [48] y-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [48]
$\Rightarrow \ddot{y}_n(t_b)$	М		BIT STRING (5)	y-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [48]
$\Rightarrow z_n(t_b)$	М		BIT STRING (27)	z-coordinate of satellite at time t <sub>b</sub> (kilometers) [48]
$\Rightarrow \dot{z}_n(t_b)$	M		BIT STRING (24)	z-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [48]
$\Rightarrow \ddot{z}_n(t_b)$	M		BIT STRING (5)	z-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [48]
>SBAS Earth-Centered, Earth- fixed Parameters				Model-5
>>t <sub>0</sub>	C-ClockMo del		BIT STRING (13)	Time of applicability (seconds) [46]
>>Accuracy	М		BIT STRING (4)	(dimensionless) [46]
>>X <sub>G</sub>	М		BIT STRING (30)	(meters) [46]
>>Y <sub>G</sub>	М		BIT STRING (30)	(meters) [46]
>>Z <sub>G</sub>	М		BIT STRING (25)	(meters) [46]
>>X <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) [46]
>>Y <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) [46]
>>Z <sub>G</sub> Rate-of-Change	М		BIT STRING (18)	(meters/sec) [46]
>>X <sub>G</sub> Acceleration	М		BIT STRING (10)	(meters/sec <sup>2</sup> ) [46]
>>Y <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) [46]
>>Z <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) [46]

Condition	Explanation
ClockModel	This IE shall be present if 'SBAS Earth-Centered,
	Earth-fixed Parameters' (Model-5) in IE GANSS
	Additional Clock Models is not included in GANSS
	Additional Navigation Models IE.

## 9.2.1.94 GANSS Real Time Integrity

This IE contains parameters that describe the real-time status of the GANSS constellation.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
Satellite Information		1 to <maxgan SSSat&gt;</maxgan 		
>Bad GANSS Sat ID	M		INTEGER(063)	Defined in [18].
>Bad GANSS Signal ID	0		BIT STRING(8)	Coded as defined in [18].

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE

## 9.2.1.95 GANSS Receiver Geographical Position (GANSS RX Pos)

The GANSS Receiver Geographical Position IE is used to identify the geographical coordinates of a GANSS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	М		ENUMERATED ( North, South)	
Degrees of Latitude	М		INTEGER (02 <sup>31</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>31</sup> X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	М		INTEGER (-2 <sup>31</sup> 2 <sup>31</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>32</sup> X /360 < N+1 X being the longitude in degree (-180°+180°)
Direction of Altitude	M		ENUMERATED ( Height, Depth)	
Altitude	М		INTEGER (02 <sup>15</sup> -1)	The relation between the value (N) and the altitude (a) in meters it describes is $N \le a$ <n+1, except="" for="" n="2&lt;sup">15-1 for which the range is extended to include all greater values of (a).</n+1,>

## 9.2.1.96 GANSS Time Model

The *GANSS Time Model* IE contains a set of parameters needed to relate GANSS time to selected time reference indicated by GNSS\_TO\_ID.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Time Model Reference Time	М		INTEGER(0. . 37799)	GANSS reference time (modulo 1 week) in seconds. The scale factor is 2 <sup>4</sup>
T <sub>A0</sub>	M		INTEGER(- 2147483648. .2147483647	Seconds, scale factor 2 <sup>-35</sup>
T <sub>A1</sub>	0		INTEGER(- 838860883 88607)	sec/sec, scale factor 2 <sup>-51</sup>
T <sub>A2</sub>	0		INTEGER(- 6463)	sec/sec <sup>2</sup> , scale factor 2 <sup>-68</sup>
GNSS_TO_ID	М		ENUMERAT ED(GPS,, Galileo, QZSS, GLONASS)	
Week Number	0		INTEGER(0. .8191)	Reference week of GANSS Time Model

## 9.2.1.96a GANSS Additional Time Models

The GANSS Additional Time Models IE contains a set of parameters needed to relate GANSS time to selected time references.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GNSS-GNSS Time Model		1 <maxga NSS-1&gt;</maxga 		
>GANSS Time Model			9.2.1.96	

Range Bound	Explanation
maxGANSS-1	Maximum number of GANSS systems for which data is included in this IE.

## 9.2.1.97 GANSS UTC Model

The  $GANSS\ UTC\ Model\ IE$  contains a set of parameters needed to relate GANSS time to Universal Time Coordinate (UTC).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
A <sub>1</sub>	М		BIT STRING(24)	sec/sec [39]
A <sub>0</sub>	М		BIT STRING(32)	seconds [39]
tot	M		BIT STRING(8)	seconds [39]
WN <sub>t</sub>	M		BIT STRING(8)	weeks [39]
Δt <sub>LS</sub>	M		BIT STRING(8)	seconds [39]
WN <sub>LSF</sub>	M		BIT STRING(8)	weeks [39]
DN	M		BIT STRING(8)	days [39]
$\Delta t_{LSF}$	M		BIT STRING(8)	seconds [39]

## 9.2.1.97a GANSS Additional UTC Models

The *GANSS Additional UTC Models* IE contains several sets of parameters needed to relate GANSS time to Universal Time Coordinate (UTC), as defined in [43,44,45,46,47,48].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional UTC Models				
>Model Set 1			DIT	D: (5: 1 (ONO) (
>A <sub>0-n</sub>	M		BIT STRING(16)	Bias coefficient of GNSS time scale relative to UTC time scale (seconds) [43,44,45,47]
>A <sub>1-n</sub>	М		BIT STRING (13)	Drift coefficient of GNSS time scale relative to UTC time scale (sec/sec) [43,44,45,47]
>A <sub>2-n</sub>	M		BIT STRING (7)	Drift rate correction coefficient of GNSS time scale relative to UTC time scale (sec/sec²) [43,44,45,47]
>∆t <sub>LS</sub>	M		BIT STRING (8)	Current or past leap second count (seconds) [43,44,45,47]
>t <sub>ot</sub>	M		BIT STRING (16)	Time data reference time of week (seconds) [43,44,45,47]
>WN <sub>ot</sub>	M		BIT STRING (13)	Time data reference week number (weeks) [43,44,45,47]
>WN <sub>LSF</sub>	М		BIT STRING (8)	Leap second reference week number (weeks) [43,44,45,47]
>DN	М		BIT STRING (4)	Leap second reference day number (days) [43,44,45,47]
>\Delta t <sub>LSF</sub>	М		BIT STRING (8)	Current or future leap second count (seconds) [43,44,45,47]
>Model Set 2				7. 7. 7. 7. 1
>N <sup>A</sup>	M		BIT STRING (11)	Callendar day number within four-year period beginning since the leap year (days) [48]
>t <sub>c</sub>	M		BIT STRING (32)	GLONASS time scale correction to UTC(SU) (seconds) [48]
>Delta UT1	0			, , , , ,
>>B1	M		BIT STRING (11)	Coefficient to determine ΔUT1 (seconds) [48]
>>B2 >KP	М		BIT STRING (10) BIT STRING	Coefficient to determine ΔUT1 (seconds/msd) [48]  Notification of expected leap
	O		(2)	second correction (dimensionless) [48]
>Model Set 3	N 4		DIT OTONIC	222/222
>A <sub>1</sub> wnt >A <sub>0</sub> wnt	M		BIT STRING (24) BIT STRING	sec/sec ([47], Message Type 12) seconds
>A <sub>0WNT</sub>	M		(32) BIT STRING	([47], Message Type 12) seconds
	141		(8)	([47], Message Type 12)
>WN <sub>t</sub>	М		BIT STRING (8)	weeks ([47], Message Type 12)
>∆t <sub>LS</sub>	М		BIT STRING (8)	seconds ([47], Message Type 12)
>WN <sub>LSF</sub>	M		BIT STRING (8)	weeks ([47], Message Type 12)
>DN	M		BIT STRING (8)	days ([47], Message Type 12)
$> \Delta t_{LSF}$	М		BIT STRING (8)	seconds ([47], Message Type 12)

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>UTC Standard ID	М		BIT STRING (3)	dimensionless Coded as defined in [18]

## 9.2.1.98 T<sub>UTRAN-GANSS</sub> Accuracy Class

The  $T_{UTRAN-GANSS}$  Accuracy Class IE indicates the accuracy class of the UTRAN GANSS Timing of Cell Frames for UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
T <sub>UTRAN-GANSS</sub> Accuracy Class			ENUMERATED (	More information about Tutran-
			Accuracy Class A,	GANSS Measurement Accuracy
			Accuracy Class B,	Class is included in [22] and
			Accuracy Class C,	[23].
			)	

## 9.2.1.99 T<sub>UTRAN-GANSS</sub> Measurement Threshold Information

The  $T_{UTRAN-GANSS}$  Measurement Threshold Information IE defines the related thresholds for UTRAN GANSS Timing of Cell Frames for UE Positioning measurements shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T <sub>UTRAN-GANSS</sub> Change Limit	0		INTEGER (1256)	Change of T <sub>UTRAN-GANSS</sub> value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T <sub>UTRAN-GANSS</sub> Deviation Limit	0		INTEGER (1256)	Deviation of the predicated T <sub>UTRAN-GANSS</sub> from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

# 9.2.1.100 T<sub>UTRAN-GANSS</sub> Measurement Value Information

The  $T_{UTRAN-GANSS}$  Measurement Value Information IE indicates the measurement results related to the UTRAN GANSS Timing of Cell Frames for UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Tutran-ganss	M			Indicates the UTRAN GANSS Timing of Cell Frames for UE Positioning. According to mapping in [23]; significant values range from 0 to 371589119999 99.	-	
>MS	М		INTEGER(016383)	Most Significant Part	_	
>LS	М		INTEGER(0 42949672 95)	Least Significant Part	_	
Tutran-ganss Quality	0		INTEGER(0 255)	Indicates the standard deviation (std) of the Tutran-Ganss measurements in 1/16 chip. Tutran-Ganss Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported Tutran-Ganss Value, where x is the reported Tutran-Ganss Value and $\mu = E[x]$ is the expectation value of x.	_	
Tutran-ganss Drift Rate	M		INTEGER(- 5050)	Indicates the Tutran-Ganss drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GANSS clock.	_	
T <sub>UTRAN-GANSS</sub> Drift Rate Quality	O		INTEGER(050)	Indicates the standard deviation (std) of the T <sub>UTRAN</sub> -GANSS drift rate measurements in 1/256 chip per second. T <sub>UTRAN</sub> -GANSS Drift Rate Quality = √E[(x-µ) <sup>2</sup> ] = std of reported T <sub>UTRAN</sub> -GANSS Drift Rate, where x is the reported T <sub>UTRAN</sub> -GANSS Drift Rate		

			and $\mu = E[x]$ is the expectation value of x.		
GANSS Time ID	0	INTEGER(0 7)	Defines the GANSS system time for UTRAN GANSS Timing of Cell Frames. Coded as defined in [18].	YES	ignore

9.2.1.101 GANSS Reference Time

Void.

# 9.2.1.102 HARQ Memory Partitioning

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE HARQ Memory		1	Reference			
Partitioning		'				
>Implicit						
>>Number of Processes  >Explicit	M		INTEGER (18,12,1 4,16)	For HARQ process IDs going from 0 to "Number of Processes" – 1 the Total number of soft channel bits [33] is partitioned equally between all HARQ processes according to the rules in [18].	_	
>>HARQ Memory Partitioning Infomation		1 <maxno ofHARQpr ocesses&gt;</maxno 		The first instance of the parameter corresponds to HARQ process with identifier 0, the second instance to HARQ process with identifier 1, and so on.	-	
>>>Process Memory Size	М		9.2.1.49D	See [18]	-	
>>HARQ Memory Partitioning Information Extension For MIMO		0, 4, 6 or 8		FDD only The 1st instance corresponds to HARQ process with identifier set to 'maxnoofHARQpr ocesses', the 2nd instance to HARQ process with identifier set to 'maxnoofHARQpr ocesses+1', and so on.	GLOBAL	ignore
>>>Process Memory Size	М		9.2.1.49D	See [18]	-	

Range Bound	Explanation
MaxnoofHARQprocesses	Maximum number of HARQ processes for one UE [FDD - per stream
	(the maximum number of HARQ processes per UE is 2 *
	MaxnoofHARQprocesses in dual stream transmission mode)]

# 9.2.1.103 GANSS Data Bit Assistance

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
GANSS TOD	M		INTEGER(059,)	Refererence time (modulo 1 minute) of the first bit of the data in <i>Data Bits</i> IE, in seconds.
Data Bit Assistance		1 <maxgans< td=""><td></td><td></td></maxgans<>		
List		SSat>		
>Sat ID	М		INTEGER(063)	Defined in [18].
>Data Bit Assistance		1 <maxsgnty< td=""><td></td><td></td></maxsgnty<>		
Sgn List		pe>		
>>GANSS Signal ID	M		9.2.1.106	
>>Data Bits	M		BIT STRING(11024)	Raw data bits as transmitted from a specific satellite at the time indicated by GANSS_TOD. See [18].

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE
maxSgnType	Maximum number of GANSS signals included in the IE

## 9.2.1.104 GANSS ID

This IE defines a particular GANSS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS ID	М		INTEGER(07 ,)	Defines the GANSS and is coded as defined in [18].

# 9.2.1.105 GANSS Navigation Model And Time Recovery

This IE contain information required to manage the transfer of precise navigation data to the GANSS-capable UE.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Transmission Time	М		9.2.1.107	GANSS Time when the Navigation model has been retrieved
Non-Broadcast Indication	0		ENUMERAT ED(true)	If this IE is present, GANSS navigation model is not derived from satellite broadcast. See NOTE 1
Satellite Information		1 to <maxgan SSSat&gt;</maxgan 		
>Sat ID	M		INTEGER(063)	Defined in [18].
>SV Health	M		BIT STRING(5)	Coded as defined in [39]
>IOD	M		BIT STRING(10)	
>GANSS Clock Model	M		9.2.1.90	
>GANSS Orbit Model	M		9 2 1 93	

Condition	Explanation
Orbit model	The IE shall be present if the GANSS Orbit Model IE
	indicates 'Keplerian Parameters'.

Range bound	Explanation	
maxGANSSSat	Maximum number of satellites for which data is included in the IE.	

NOTE 1: The Non-Broadcast Indication allows to inform that the navigation model is not bit-to-bit the one broadcast by the satellite. If it is set to 1, the UE is informed that techniques such as data wiping off applied to the navigation model may not work for instance.

## 9.2.1.105a GANSS Additional Navigation Models And Time Recovery

This IE contain information required to manage the transfer of precise navigation data to the GANSS-capable UE.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Transmission Time	M		9.2.1.107	GANSS Time when the Navigation model has been retrieved
Non-Broadcast Indication	0		ENUMERAT ED(true)	If this IE is present, GANSS navigation model is not derived from satellite broadcast. See NOTE 1 in 9.2.1.105.
Satellite Information		1 <maxga NSSSat&gt;</maxga 		
>Sat ID	М		INTEGER(063)	Defined in [18].
>SV Health	М		BIT STRING(6)	Coded as defined in [18].
>IOD	М		BIT STRING(11)	Coded as defined in [18].
>GANSS Additional Clock Models	M		GANSS Addtional Clock Models 9.2.1.90a	
>GANSS Additional Orbit Models	М		GANSS Additional Orbit Models 9.2.1.93a	

Range bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in this IE.
	The value of maxGANSSSat is 64

## 9.2.1.106 GANSS Signal ID

This IE defines a specific signal within a particular GANSS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Signal ID	M		INTEGER(07,)	Coded as defined in [18].

## 9.2.1.107 GANSS Transmission Time

This IE indicates the GANSS Transmission Time

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
211122				
GANSS Day	0		INTEGER(0	The sequential number of days
			8191)	from the origin of the GNSS
			•	system time (indicated by the
				GANSS_ID given in the
				Requested Data Value IE)
				modulo 8192 days (about 22
				, ,
				years).
GANSS TOD	M		INTEGER(0	GANSS Time of Day in
			86399)	seconds

# 9.2.1.107a GANSS Earth Orientation Parameters

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
teop	М		BIT STRING(16)	EOP data reference time (seconds) [43]
PM_X	М		BIT STRING (21)	X-axis polar motion value at reference time  (arc-seconds) [43]
PM_X_dot	M		BIT STRING (15)	X-axis polar motion drift at reference time  (arc-seconds/day) [43]
PM_Y	М		BIT STRING (21)	Y-axis polar motion value at reference time (arc-seconds) [43]
PM_Y_dot	M		BIT STRING (15)	Y-axis polar motion drift at reference time (arc-seconds/day) [43]
ΔUT1	M		BIT STRING (31)	UT1-UTC difference at reference time (seconds) [43]
ΔUT1_dot	M		BIT STRING (19)	Rate of UT1-UTC difference at reference time (seconds/day) [43]

# 9.2.1.107b SBAS ID

This IE defines a specific SBAS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SBAS ID	M		ENUMERATED( WAAS, EGNOS, MSAS, GAGAN,)	

## 9.2.1.107c GANSS Auxiliary Information

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE GANSS-ID				
>GANSS-ID-1				This choice may only be present if GANSS ID indicated 'Modernized GPS'
>>Aux Info List		1 <maxgan SSSat&gt;</maxgan 		
>>>Sat ID	М		INTEGER(063)	Defined in [18].
>>>Signals Available	М		BIT STRING(8)	Coded as defined in [18].
>GANSS-ID-3				This choice may be present if GANSS ID indicated 'GLONASS'
>>Aux Info List		1 <maxgan SSSat&gt;</maxgan 		
>>>Sat ID	М		INTEGER(063)	Defined in [18].
>>>Signals Available	М		BIT STRING(8)	Coded as defined in [18].
>>>Channel Number	M		INTEGER (-713)	This field indicates the GLONASS carrier frequency number of the satellite identified by <i>Sat ID</i> , as defined in [48].

Range Bound	Explanation
maxGANSSSat	Maximum number of GANSS satellites for which data is included in this IE.

#### 9.2.1.108 IP Multicast Indication

The *IP Multicast Indication* IE indicates the IP multicast group information dedicated to an MBMS service and the CFN Offset, defined as the offset between MFN and CFN for a FACH. When Node B receives such an indication, if supported, it may join the corresponding IP multicast group. When Node B receives data frame from this IP multicast group, it shall consider the value of the CFN field in the data frame as MFN and calculate the actual CFN for the concerned FACH according to following equation:

 $CFN = (MFN - CFN Offset) \mod 256.$ 

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address	М		9.2.1.63	An MBMS service corresponds to a dedicated IP multicast address.
Binding ID	M		9.2.1.4	Indicating multicast port.
CFN Offset	M		INTEGER (0255)	

#### 9.2.1.109 IP Multicast Data Bearer Indication

The *IP Multicast Data Bearer Indication* IE indicates whether the Node B is ready for receiving concerned MBMS service data through IP multicast transport bearer.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP Multicast Data Bearer Indication			BOOLEAN	True: IP multicast data bearer is used. False: IP multicast data bearer is not used.

## 9.2.1.110 SixtyfourQAM DL Capability

This parameter defines the SixtyfourQAM downlink capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL Capability			ENUMERATED (SixtyfourQAM DL Capable, SixtyfourQAM DL	
			Non-Capable)	

## 9.2.1.111 FACH Measurement Occasion Cycle Length Coefficient

The FACH Measurement Occasion Cycle Length Coefficient IE provides information used for MAC-hs scheduling decision for MAC-c PDU in Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FACH Measurement Occasion Cycle Length Coefficient			INTEGER (112)	

#### 9.2.1.112 MAC-ehs Reset Timer

The MAC-ehs Reset Timer IE is used as Reset Timer (Treset) described in ref [32] subclause 11.6.4.5.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-ehs Reset Timer			ENUMERATED (1, 2, 3, 4,)	Timer in multiples of T1 values (milliseconds). Used when MAC-ehs reordering queue is reset in CELL_FACH and CELL_PCH

## 9.2.1.113 Paging MAC Flow ID

Paging MAC Flow ID is the unique identifier for one Paging MAC flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow ID			INTEGER (03)	

## 9.2.1.114 Enhanced FACH Capability

This parameter defines the Enhanced FACH capability for a Local Cell. [1.28Mcps TDD - This parameter defines the Enhanced FACH capability for both uplink and downlink]

IE/Group Name	Presen	Range	IE Type and	Semantics Description
	ce		Reference	

Enhanced FACH Capability	ENUMERATED
	(Enhanced FACH
	Capable, Enhanced
	FACH Non-Capable)

## 9.2.1.115 Enhanced PCH Capability

This parameter defines the Enhanced PCH capability for a Local Cell.

IE/Group Name	Presen ce	Range	IE Type and Reference	Semantics Description
Enhanced PCH Capability			ENUMERATED (Enhanced PCH Capable, Enhanced PCH Non-Capable)	

## 9.2.1.116 Enhanced UE DRX Capability

This parameter defines the Enhanced UE DRX capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced UE DRX Capability			ENUMERATED (Enhanced UE DRX Capable, Enhanced UE DRX non Capable)	

## 9.2.1.117 Priority Queue Information for Enhanced FACH/PCH

The *Priority Queue Information for Enhanced FACH/PCH* IE provides information associated to HSDPA Priority Queue used for Enhanced FACH and/or Enhanced PCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID	M		9.2.1.49C	
Scheduling Priority Indicator	M		9.2.1.53H	
T1	M		9.2.1.56a	
MAC-ehs Reset Timer	M		9.2.1.112	
Discard Timer	0		9.2.1.24E	Shall be ignored in case of Enhanced PCH
MAC-hs Window Size	M		9.2.1.38B	
Maximum MAC-c PDU Size	M		MAC PDU Size	
			Extended	
			9.2.1.38C	

# 9.2.2 FDD specific parameters

## 9.2.2.a ACK-NACK Repetition Factor

The ACK-NACK Repetiton Factor IE indicates the number of consecutive repetitions of the ACK and NACK.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ACK-NACK Repetition Factor			INTEGER (14,)	Step: 1

## 9.2.2.b ACK Power Offset

The *ACK Power Offset* IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ ACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ACK Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

## 9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CM Configuration Change CFN	M		CFN 9.2.1.7	
Transmission Gap Pattern Sequence Status		0 <maxt GPS&gt;</maxt 		
>TGPS Identifier	M		INTEGER (1maxTGPS)	If the group is not present, none of the pattern sequences are activated. References an already defined sequence.
>TGPRC	М		INTEGER (0511)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. "0"=Infinity
>TGCFN	М		CFN 9.2.1.7	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.

Range Bound	Explanation
maxTGPS	Maximum number of active pattern sequences. Value 6.

## 9.2.2.B Adjustment Period

The Adjustment Period IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1256)	Unit: Frames

## 9.2.2.C Adjustment Ratio

The Adjustment Ratio IE (Radj) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Ratio			INTEGER (0100)	Unit: None
				Range: 01
				Step: 0.01

#### 9.2.2.D AICH Power

The AICH Power IE indicates a power level (measured as the power per transmitted acquisition indicator when several AIs are transmitted in parallel) relative to the primary CPICH power configured in a cell. If Transmit Diversity is applied to the AICH, the AICH Power IE indicates the power offset between the linear sum of the power for the AICH on all branches and the Primary CPICH power configured in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Power			INTEGER (-22+5)	Unit: dB
				Range: -22 +5 dB
				Step: 1 dB

## 9.2.2.1 AICH Transmission Timing

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
AICH Transmission Timing			ENUMERATED (0, 1)	See parameter AICH_Transmission_Timing in ref. [7].

## 9.2.2.1A AP Preamble Signature

Void.

#### 9.2.2.1B AP Sub Channel Number

Void.

#### 9.2.2.1Ba Best Cell Portions

Best Cell Portions IE indicates the best received cell portions and their SIR values when Cell Portions are defined in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Best Cell Portions		1 <maxno< 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

## 9.2.2.1Bb Bundling Mode Indicator

The Bundling Mode Indicator indicates whether the bundling shall be done or shall not be done for Iub.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Bundling Mode Indicator			ENUMERATED (	The value "Bundling" is
_			Bundling, No	applicable only when E-TTI
			bundling)	indicates "2ms".

#### 9.2.2.1C CD Sub Channel Numbers

Void.

#### 9.2.2.1Ca Cell Portion ID

Cell Portion ID is the unique identifier for a cell portion within a cell. See [4].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion ID			INTEGER (063,)	

## 9.2.2.1D Channel Assignment Indication

Void.

## 9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset relative to the Primary CPICH timing for the DL DPCH or for the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Chip Offset			INTEGER (038399)	Unit: chips

## 9.2.2.2A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Closed Loop Timing			ENUMERATED (	According to ref. [10] subclause 7.1:
Adjustment Mode			Offset1, Offset2,	"Offset1" = slot(j+1)mod15
			)	"Offset2" = slot(j+2)mod15

## 9.2.2.3 Common Channels Capacity Consumption Law

Void.

## 9.2.2.3A Compressed Mode Deactivation Flag

The Compressed Mode Deactivation Flag indicates whether Compressed Mode shall be deactivated or not in the new RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Compressed Mode			ENUMERATED (	
Deactivation Flag			Deactivate,	
			Maintain Active)	

9.2.2.4 Compressed Mode Method

Void.

9.2.2.4A CPCH Allowed Total Rate

Void.

9.2.2.4B CPCH Scrambling Code Number

Void.

9.2.2.4C CPCH UL DPCCH Slot Format

Void.

#### 9.2.2.4Ca CQI Power Offset

The *CQI Power Offset* IE indicates Power offset used in the UL between the HS-DPCCH slots carrying CQI information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

## 9.2.2.4Cb CQI Repetition Factor

The CQI Repetiton Factor IE indicates the number of consecutive repetitions of the CQI.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Repetition Factor			INTEGER (14,)	Step: 1

## 9.2.2.4D DCH FDD Information

The *DCH FDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH FDD Information		1 <maxno ofDCHs&gt;</maxno 			_	
>Payload CRC Presence Indicator	M		9.2.1.49		_	
>UL FP Mode	М		9.2.1.66		_	
>ToAWS	М		9.2.1.61		_	
>ToAWE	М		9.2.1.60		_	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>Transport Format Set	М		9.2.1.59	For UL	_	
>>Transport Format Set	М		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 and Reference	Semantics Description	Criticality	Assigned Criticality
DCHs FDD To Modify		1 <maxno ofDCHs&gt;</maxno 			_	
>UL FP Mode	0		9.2.1.66		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>Transport Format Set	0		9.2.1.59	For the UL.	_	
>>Transport Format Set	0		9.2.1.59	For the DL.	_	
>>Allocation/Retention Priority	0		9.2.1.1A		_	
>>Frame Handling Priority	0		9.2.1.30		_	
>>Unidirectional DCH Indicator	0		9.2.1.68		YES	reject
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxnoofDCHs	Maximum number of DCHs for one UE

## 9.2.2.4F DCH Indicator For E-DCH-HSDPA Operation

The DCH Indicator For E-DCH-HSDPA Operation parameter indicates whether *DCH Information* IE should be ignored in the message in which the *DCH Indicator For E-DCH-HSDPA Operation* IE is included.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH Indicator For E-DCH-			ENUMERATED	
HSDPA Operation			(DCH not present)	

## 9.2.2.4G Transport Bearer Not Requested Indicator

The Transport Bearer Not Requested Indicator parameter indicates that a transport bearer shall not be established or may not to be established for a DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Not			ENUMERATED	
Requested Indicator			(Transport Bearer	
-			shall not be	
			Established,	
			Transport Bearer	
			may not be	
			Established)	

## 9.2.2.4H Transport Bearer Not Setup Indicator

The Transport Bearer Not Setup Indicator parameter indicates that a transport bearer will not be established for a DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Not Setup			ENUMERATED	
Indicator			(Transport Bearer	
			Not Setup)	

9.2.2.5 D-Field Length

Void.

9.2.2.6 Dedicated Channels Capacity Consumption Law

Void.

9.2.2.7 Diversity Control Field

Void.

9.2.2.8 Diversity Indication

Void.

## 9.2.2.9 Diversity Mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Mode			ENUMERATED ( None, STTD,	The <i>Diversity Mode</i> IE shall never be set to "Not Used". If received it shall be rejected.
			Closed loop mode 1, Not Used,)	

#### 9.2.2.10 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, accordingly to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER (016,)	

## 9.2.2.10A DL DPCH Timing Adjustment

The DL DPCH Timing Adjustment indicates that a timing adjustment of the related radio link is required or that an Initial DL DPCH Timing Adjustment has been performed by the Node B. It also indicates whether the timing adjustment consists of a timing advance or a timing delay with respect to the SFN timing. The adjustment always consists of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Timing Adjustment			ENUMERATED (	The size of the timing
			timing advance,	adjustment is 256 chips.
			timing delay)	_

## 9.2.2.11 DL frame type

Void.

## 9.2.2.12 DL or Global Capacity Credit

Void.

## 9.2.2.12A DL\_power\_averaging\_window\_size

The *DL\_power\_averaging\_window\_size* IE defines the window size when Limited Power Increase is used [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL_power_averaging_window			INTEGER (160)	Unit: inner loop power
_size				adjustments
				Range: 160
				Step: 1 adjustment

## 9.2.2.12B DL Power Balancing Information

The *DL Power Balancing Information* IE provides information for power balancing to be activated in the relevant RL(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type	М		9.2.2.27	
, ,,	1		· · · · · · · · · · · · · · · · · · ·	Dawer on DDCH or on E
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	
			Updated)	

## 9.2.2.13 DL Scrambling Code

DL scrambling code to be used by the RL. One cell may have multiple DL scrambling codes available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code			INTEGER (015)	"0" = Primary scrambling code of the cell "1""15" = Secondary scrambling code

#### 9.2.2.13A DL TPC Pattern 01 Count

The *DL TPC Pattern 01 Count* IE contains the value of the parameter n, which is used for determining the DL TPC pattern on Radio Links marked with "first RLS" by the *First RLS indicator* IE before UL synchronisation is achieved.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL TPC Pattern 01 Count			INTEGER(030,)	

#### 9.2.2.13B DSCH FDD Information

Void.

## 9.2.2.13C DPC Mode

The DPC Mode IE indicates the DPC mode to be applied [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode			ENUMERATED ( Mode0, Mode1,)	"Mode0": The Node B shall estimate the UE transmitted TPC command and update the DL power in every slot  "Mode1": The Node B shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots

## 9.2.2.13D DSCH FDD Common Information

Void.

## 9.2.2.13Da E-DCH FDD Information

The E-DCH FDD Information IE provides information for an E-DCH to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flows Information	М		9.2.2.13M		-	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn	If this IE is not included, scheduled transmission in all HARQ processes is allowed.	-	
E-DCH Maximum Bitrate	0		9.2.2.13T		ı	
E-DCH Processing Overload Level	0		9.2.1.79		1	
E-DCH Reference Power Offset	0		9.2.2.13Y		_	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85		YES	ignore
SixteenQAM UL Operation Indicator	0		9.2.2.88A		YES	reject
E-AGCH Table Choice	C- SixteenQA M UL Operation		9.2.2.100		YES	ignore

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE is
	set to 'Activate'.

# 9.2.2.13DA E-DCH FDD Update Information

The *E-DCH FDD Update Information* IE provides information for E-DCH to be updated. At least one IE shall be present.

IE/Group Name	Presenc	Range	IE Type and	Semantics	Criticality	Assigned
-	е		Reference	Description	_	Criticality
E-DCH MAC-d Flow Specific Update Information		0 <max noofED CHMAC dFlows&gt;</max 			_	
>E-DCH MAC-d Flow ID	M		9.2.1.74		_	
>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	
E-DCH DL Control Channel Change Information		0 <max noofED CHRLs &gt;</max 			GLOBAL	Ignore
>E-DCH RL ID	М		RL ID 9.2.1.53		-	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows.
maxnoofEDCHRLs	Maximum number of E-DCH RLs for one UE

# 9.2.2.13Db E-DCH FDD Information Response

The *E-DCH FDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information Response		0 <max noofED CHMAC dFlows&gt;</max 			_	
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		_	
>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	
>Transport Bearer Not Setup Indicator	0		9.2.2.4H		YES	ignore
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows.

#### 9.2.2.13Dc E-DCH FDD DL Control Channel Information

The *E-DCH FDD DL Control Channel Information* IE provides information for E-DCH specific DL Control Channels to be provided to UE via RRC signalling.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-AGCH And E-RGCH/E- HICH FDD Scrambling Code	0		DL Scrambling Code 9.2.2.13	Scrambling code on which E- AGCH, E- RGCH and E-HICH are transmitted.	-	
E-AGCH Channelisation Code	0		FDD DL Channelisation Code Number 9.2.2.14		-	
Primary E-RNTI	0		E-RNTI 9.2.1.75		_	
Secondary E-RNTI	0		E-RNTI 9.2.1.75		-	
E-RGCH/E-HICH Channelisation Code	0		FDD DL Channelisation Code Number 9.2.2.14		-	
E-RGCH Signature Sequence	0		INTEGER (0maxnoofSigS eqE-RGHICH - 1)		-	
E-HICH Signature Sequence	0		INTEGER (0maxnoofSigS eqE-RGHICH - 1)		-	
Serving Grant Value	0		INTEGER (037,38)	indicates E-DCH serving grant index as defined in [32]; index 38 means zero grant	ŀ	
Primary/Secondary Grant Selector	0		ENUMERATED (Primary, Secondary)	Indicates whether the Serving Grant Value is granted with a primary E- RNTI or a secondary E- RNTI	+	
E-RGCH Release Indicator	0		9.2.2.13lc			
Default Serving Grant in DTX Cycle 2	0		INTEGER (037,38)	Serving Grant value to be used in DTX-Cycle-2. (037) indicates E- DCH serving grant index as defined in [32]; index 38 means zero grant	YES	ignore

Range bound	Explanation
maxnoofSigSegF-RGHICH	Maximum number of Signature Sequences for E-RGCH/E-HICH.

#### 9.2.2.13De E-DCH RL Indication

Indicates whether a RL is an E-DCH RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH RL Indication			ENUMERATED(E- DCH, non E-DCH)	

# 9.2.2.13Df E-DCH FDD Information to Modify

The *E-DCH FDD Information to Modify* IE is used for the modification of an E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		0 <maxno ofEDCHM ACdFlows &gt;</maxno 			-	· · · · · · · · · · · · · · · · · · ·
>E-DCH MAC-d Flow ID	M		9.2.1.74		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	M		9.2.1.62A		_	
>TNL QoS	0		9.2.1.58A		_	
>Maximum Number Of Retransmissions For E- DCH	0		9.2.1.81		_	
>E-DCH HARQ Power Offset FDD	0		9.2.2.13Dk		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69		_	
>CHOICE E-DCH Grant Type	0				_	
>>E-DCH Non- Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	М		9.2.2.13Dm	If the Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission IE is present, this IE shall be ignored	_	
>>>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		-	
>>>Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	0		9.2.2.13Dr		YES	reject
>>E-DCH Scheduled Transmission Grant			NULL			
>Bundling Mode Indicator	0		9.2.2.1Bb		_	
>E-DCH Logical Channel To Add	0		E-DCH Logical Channel Information 9.2.1.71		_	
>E-DCH Logical Channel To Modify	0		9.2.1.72		_	
>E-DCH Logical Channel To Delete		0 <maxno oflogicalch annels&gt;</maxno 			_	
>>Logical Channel ID	М		9.2.1.80		_	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn		_	
E-DCH Maximum Bitrate	0		9.2.2.13T			
E-DCH Processing Overload Level	0		9.2.1.79		_	
E-DCH Reference Power	0		9.2.2.13Y		-	

Offset					
MAC-e Reset Indicator	0		9.2.1.83	1	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85	YES	ignore
SixteenQAM UL Operation Indicator	0		9.2.2.88A	YES	reject
E-DCH MAC-d PDU Size Format	0		9.2.1.74B	YES	reject
E-DCH DL Control Channel Grant Information		0 <maxno ofEDCHR Ls&gt;</maxno 		GLOBAL	ignore
>E-DCH RL ID	М		RL ID 9.2.1.53	-	
E-AGCH Table Choice	C- SixteenQA M UL Operation		9.2.2.100	YES	igonre

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE
	is set to 'Activate'.

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxnooflogicalchannels	Maximum number of logical channels
maxnoofEDCHRLs	Maximum number of E-DCH RLs for one UE

# 9.2.2.13Dh E-DCH Transport Format Combination Set Information (E-TFCS Information)

Whereas the related Transport Block sizes are standardised in [32] this IE gives details on the referenced Transport Block Size Table, the E-DCH Minimum Set E-TFCI, the Reference E-TFCIs and configuration parameters used for the calculation of the gain factors  $\beta_{ec}$  and  $\beta_{ed}$  defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-TFCI Table Index	M		INTEGER (01,, 27)	Indicates which standardised E-TFCS Transport Block Size Table shall be used. The related tables are specified in [32].	-	
E-DCH Minimum Set E-TFCI	0		INTEGER (0127)	For the concept of "E-DCH Minimum Set of TFCs" see [32] and [18].	-	
Reference E-TFCI Information		1 <maxn oofRefET FCIs&gt;</maxn 			_	
>Reference E-TFCI	М		INTEGER (0127)		_	
>Reference E-TFCI Power Offset	М		9.2.2.13Dp	If the Extended Reference E- TFCI Power Offset IE is present, this IE shall be ignored	-	
>Extended Reference E- TFCI Power Offset	0		9.2.2.13Dq		YES	reject
E-TFCI Boost Information	0		9.2.2.88B		YES	reject
E-DPDCH Power Interpolation	0		BOOLEAN	True means that the E-DPDCH power interpolation formula shall be applied, False means that the E-DPDCH power extrapolation formula shall be applied for the computation of the gain factor $\beta_{ed}$ according to [10]	YES	reject

Range Bound	Explanation
maxnoofRefETFCIs	Maximum number of signalled reference E-TFCIs

# 9.2.2.13Di E-TTI

The E-TTI parameter indicates the Transmission Time Interval for E-DPCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TTI			ENUMERATED	
			(2ms, 10ms)	

#### 9.2.2.13Dj E-DPCCH Power Offset

The E-DPCCH Power Offset is used to calculate the E-DPCCH gain factor  $\beta_{ec}$  as defined in [10], whereas  $\beta_{ec}$  is related to the power difference between DPCCH and E-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DPCCH Power Offset			INTEGER (08)	According to mapping in ref. [9] subclause 4.2.1.3.

#### 9.2.2.13Dk E-DCH HARQ Power Offset FDD

The E-DCH HARQ Power Offset FDD is used to calculate the unquantised gain factor for an E-TFC ( $\beta_{ed,j,uq}$ ) as defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset FDD			INTEGER (06)	According to mapping in ref. [9] subclause 4.2.1.3.

#### 9.2.2.13DI E-DCH MAC-d Flow Multiplexing List

Void.

# 9.2.2.13Dm Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission

The Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission indicates the number of bits allowed to be included in a MAC-e PDU per E-DCH MAC-d flow configured for non-scheduled transmissions. If the range of the *Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission* IE is insufficient to represent the value to be sent to the Node B, the *Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission* IE shall be used to represent the value to be sent to the Node B, see section 9.2.2.13Dr.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission			INTEGER (119982)	

#### 9.2.2.13Dn HARQ Process Allocation For 2ms TTI

The HARQ Process Allocation for 2ms TTI indicates those HARQ processes that are allowed. MAC-d PDU"s for a MAC-d flow are only allowed to be transmitted in those processes for which the bit is set to "1".

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HARQ Process Allocation For 2ms TTI			BIT STRING (8)	The first Bit corresponds to HARQ process ID = 0, the second bit corresponds to HARQ process ID = 1, etc. The HARQ process ID for 2ms TTI is defined in [32], chapter 11.8.1.3.

#### 9.2.2.13Dp Reference E-TFCI Power Offset

The Reference E-TFCI Power Offset is used to calculate the reference E-TFC gain factor  $\beta_{ed,ref}$  as defined in [10]. If the range of the *Reference E-TFCI Power Offset* IE is insufficient to represent the value to be sent to the Node B, the *Extended Reference E-TFCI Power Offset* IE shall be used to represent the value to be sent to the Node B, see section 9.2.2.13Dq.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference E-TFCI Power			INTEGER (029)	According to mapping in ref.
Offset				[9] subclause 4.2.1.3

#### 9.2.2.13Dq Extended Reference E-TFCI Power Offset

The *Extended Reference E-TFCI Power Offset* IE shall be used if the range of the *Reference E-TFCI Power Offset* IE (see section 9.2.2.13Dp) is insufficient to represent the value of the Reference E-TFCI Power Offset to be sent to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Reference E-TFCI			INTEGER	According to mapping in ref.
Power Offset			(3031,)	[9] subclause 4.2.1.3

# 9.2.2.13Dr Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission

The Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission IE shall be used if the range of the Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission IE (see section 9.2.2.13Dm) is insufficient to represent the value of the Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission to be sent to the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Maximum Number of			INTEGER	
Bits per MAC-e PDU for Non-			(1998322978,)	
scheduled Transmission				

#### 9.2.2.13E Enhanced DSCH PC

Void.

#### 9.2.2.13F Enhanced DSCH PC Counter

Void.

#### 9.2.2.13G Enhanced DSCH PC Indicator

Void.

#### 9.2.2.13H Enhanced DSCH PC Wnd

Void.

# 9.2.2.13I Enhanced DSCH Power Offset

Void.

#### 9.2.2.13la E- RGCH/E-HICH Code Information

This parameter defines the codes which will be assigned for E- RGCH and E-HICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	M			
>replace				
>>E-RGCH/E-HICH Code		1 <maxno ofERGCH EHICHs&gt;</maxno 		
>>>Code Number	M		FDD DL Channelisation Code Number 9.2.2.14	
>remove			NULL	

Range Bound	Explanation
MaxnoofERGCHEHICHs	Maximum number of E-RGCH/E-HICH channelisation codes for one
	cell.

#### 9.2.2.13lb E- AGCH Code Information

This parameter defines the codes which will be assigned for E- AGCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE replaceremove	М			
>replace				
>>E-AGCH Code		1 <maxno ofEAGCHs &gt;</maxno 		
>>>Code Number	М		FDD DL Channelisation Code Number 9.2.2.14	
>remove			NULL	

Range Bound	Explanation		
MaxnoofEAGCHs	Maximum number of E-AGCH chanellisation codes for one cell.		

#### 9.2.2.13lc E-RGCH Release Indicator

Indicates the E-RGCH is released.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH Release Indicator			ENUMERATED (E- RGCH released)	

#### 9.2.2.13Id E-AGCH Power Offset

The *E-AGCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-AGCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH Power Offset			INTEGER	Unit: dB
			(0255,)	Range: -32 +31.75 dB
				Step: 0.25 dB

#### 9.2.2.13le E-RGCH Power Offset

The *E-RGCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-RGCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH Power Offset			INTEGER	Unit: dB
			(0255,)	Range: -32 +31.75 dB
				Step: 0.25 dB

#### 9.2.2.13lf E-HICH Power Offset

The *E-HICH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-HICH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Power Offset			INTEGER	Unit: dB
			(0255,)	Range: -32 +31.75 dB Step: 0.25 dB

#### 9.2.2.13lg E-RGCH 2-Index-Step Threshold

The E-RGCH 2-index-step-threshold IE is used to determine the Serving Grant.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH 2-Index-Step			INTEGER	Refers to an index in the "SG-
Threshold			(037)	Table" (see [32]).

#### 9.2.2.13lh E-RGCH 3-Index-Step Threshold

The E-RGCH 3-index-step-threshold IE is used to determine the Serving Grant.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH 3-Index-Step Threshold			INTEGER (037)	Refers to an index in the "SG-Table" (see [32]).

#### 9.2.2.13J E-DCH Capability

Void

#### 9.2.2.13Ja E-DCH Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the RL/RLS situation and the number of uplink E-DPDCHs and their spreading factors. The reference spreading factor and number of E-DPDCH is signalled using the *Maximum Set of E-DPDCHs* IE.

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure. For the Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into

In the case where multiple Radio Links are established in one procedure, for every created Radio Link Set, the first Radio Link is always the Radio Link with the lowest repetition number.

The costs given in the consumption law are the costs per channelization code/no of E-DPDCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SF Allocation Law		1 <maxno ofCombED PDCH&gt;</maxno 		For each SF, cost of its allocation, in decending order: the first instance corresponds to multicode configuration 2*SF2+2*SF4, the second to 2*SF2, the third to 2*SF4, the fourth to singlecode configuration SF = 4, the fifth to SF = 8, the sixth to SF16, the seventh to SF32 and the eight to SF64 and so on.
>UL Cost 1	M		INTEGER (065535)	This is the cost of a RLS
>UL Cost 2	M		INTEGER (065535)	This is the cost of a RL
DL Cost 1	0		INTEGER (065535)	This is the cost of a RLS. If not present, zero cost shall be applied.
DL Cost 2	0		INTEGER (065535)	This is the cost of a RL. If not present, zero cost shall be applied.

Range Bound	Explanation
maxnoofCombEDPDCH	Maximum number of Configurations in the <i>Maximum Set of E-DPDCH</i> IE

# 9.2.2.13K E-DCH Logical Channel Information

Void

# 9.2.2.13L E-DCH Logical Channel To Modify

Void

# 9.2.2.13M E-DCH MAC-d Flows Information

The *E-DCH MAC-d Flows Information* IE is used for the establishment of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows</maxno 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>TNL QoS	0		9.2.1.58A		_	
>Payload CRC Presence	М		9.2.1.49		_	
Indicator						
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.81		-	
>E-DCH HARQ Power Offset FDD	М		9.2.2.13Dk		-	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69		-	
>CHOICE E-DCH Grant Type	M				_	
>>E-DCH Non-Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	M		9.2.2.13Dm	If the Extended Maximum Number of Bits per MAC- e PDU for Non- scheduled Transmission IE is present, this IE shall be ignored	_	
>>>HARQ Process Allocation For 2ms Non- Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.13Dn	If this IE is not included, transmission in all HARQ processes is allowed.	-	
>>>Extended Maximum Number of Bits per MAC- e PDU for Non-scheduled Transmission	0		9.2.2.13Dr		YES	reject
>>E-DCH Scheduled Transmission Grant			NULL			
>Bundling Mode Indicator	0		9.2.2.1Bb		_	
>E-DCH Logical Channel Information	M		9.2.1.71		_	
>Transport Bearer Not Requested Indicator	0		9.2.2.4G		YES	ignore

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

# 9.2.2.13N E-DCH MAC-d Flows To Delete

Void

# 9.2.2.13O E-DCH MAC-d Flow ID

Void

9.2.2.13P E-RNTI

Void

9.2.2.13Q E-DCH DDI Value

Void

9.2.2.13R E-DCH Provided Bit Rate Value

Void

9.2.2.13S E-DCH Provided Bit Rate Value Information

Void

#### 9.2.2.13T E-DCH Maximum Bitrate

The E-DCH Maximum Bitrate parameter indicates the Maximum Bitrate for an E-DCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-DCH Maximum Bitrate			INTEGER (05742,, 574311498)	Bitrate on transport block level. Unit is kbits per second.

# 9.2.2.13U E-DCH Processing Overload Level

Void

# 9.2.2.13V E-DCH TTI Capability

This parameter defines the E-DCH TTI Capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TTI2ms Capability			BOOLEAN	True = TTI 10ms and 2ms supported for E-DCH False = only TTI 10ms supported for E-DCH

# 9.2.2.13W E-DCH SF Capability

This parameter defines the E-DCH Capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH SF Capability			ENUMERATED (sf64, sf32, sf16, sf8, sf4, 2sf4, 2sf2, 2sf2and2sf4,)	Min SF supported by the cell in E-DCH

# 9.2.2.13X E-DCH HARQ Combining Capability

This parameter defines the E-DCH HARQ Combining capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Combining			ENUMERATED (IR	
Capability			Combining Capable,	
			Chase Combining	
			Capable, IR and	
			Chase Combining	
			Capable)	

#### 9.2.2.13Y E-DCH Reference Power Offset

The E-DCH Reference Power Offset is used to estimate the E-DPDCH power from E-TFCI without decoding MAC-e PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Reference Power			INTEGER (06)	According to mapping in ref.
Offset				[9] subclause 4.2.1.3.

# 9.2.2.13Z E-DCH Power Offset for Scheduling Info

Void

#### 9.2.2.14 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
FDD DL Channelisation Code			INTEGER (0511)	According to the mapping in
Number				[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	M		9.2.2.14	
>Transmission Gap Pattern Sequence Code Information	0		9.2.2.53B	

Range Bound	Explanation
maxnoofCodes	Maximum number of DL code information

#### 9.2.2.14B FDD S-CCPCH Frame Offset

The FDD S-CCPCH Frame Offset IE represents a frame offset between the concerned S-CCPCH"s CFN (Connection Frame Number) relatively to the P-CCPCH"s SFN (System Frame Number) of the respective cell. The FDD S-CCPCH Frame Offset IE shall be the constant difference between the S-CCPCH"s CFN and the least significant 8 bits of the SFN (System Frame Number) on Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD S-CCPCH Frame Offset			ENUMERATED (1, 2, 4,)	Offset in frames (corresponding to 10msec, 20msec or 40msec offset in time)

# 9.2.2.15 FDD SCCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD SCCPCH Offset			INTEGER (0149)	Unit: chip Range: 038144 chips Step: 256 chips See ref. [7]

#### 9.2.2.16 FDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD TPC Downlink Step Size			ENUMERATED	Unit: dB
			(0.5, 1, 1.5, 2,)	

# 9.2.2.16a F-DPCH Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Capability			ENUMERATED (F-	
			DPCH Capable, F-	
			DPCH Non-Capable)	

## 9.2.2.16A First RLS Indicator

The *First RLS Indicator* IE indicates if a specific Radio Link and all Radio Links which are part of the same Radio Link Set, shall be considered as the first radio links established towards the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
First RLS Indicator			ENUMERATED ( First RLS,	
			Not First RLS,)	

#### 9.2.2.17 Gap Period

Void.

#### 9.2.2.18 Gap Position Mode

Void.

#### 9.2.2.18a HARQ Preamble Mode

The HARQ Preamble Mode IE is used as described as in ref [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERATED ( mode0, mode1)	"mode0" means HARQ Preamble Mode =0 "mode1" means HARQ Preamble Mode =1

#### 9.2.2.18b HARQ Preamble Mode Activation Indicator

The HARQ Preamble Activation Indicator indicates if the configured HARQ Preamble Mode has been activated in the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERATED(HA	
Activation Indicator			RQ Preamble Mode	
			Activated).	

#### 9.2.2.18ba HARQ Info for E-DCH

The E-DCH HARQ Info is used to indicate the use of redundancy version (RV) for the EDCH HARQ transmissions.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
HARQ Info for E-DCH			ENUMERATED (rv0, rvtable)	"rv0" indicates that the UE will only use E_DCH RV index 0. "rvtable" indicates that the UE will use an RSN based RV index as specified in [8]

#### 9.2.2.18c Logical channel ID

Void

#### 9.2.2.18A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, the Node B shall use the limited power increase algorithm as specified in [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERATED (	
			Used,	
			Not Used )	

# 9.2.2.18B Inner Loop DL PC Status

The *Inner Loop DL PC Status* IE indicates whether inner loop DL control shall be active or inactive for all radio links associated with the context identified by the *Node B Communication Context Id* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERATED (	
			Active,	
			Inactive)	

#### 9.2.2.18C IPDL FDD Parameters

The IPDL FDD Parameters IE provides information about IPDL to be applied for FDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP SpacingFDD	M		ENUMERATED (5, 7, 10, 15, 20, 30, 40, 50,)	See [10]
IP Length	M		ENUMERATED (5, 10)	See [10]
Seed	M		INTEGER (063)	See [10]
Burst Mode Parameters	0		9.2.1.5A	
IP Offset	M		INTEGER (09)	See [10]

#### 9.2.2.18Ca HS-DSCH configured indicator

The *HS-DSCH Configured Indicator* IE indicates the configuration of HS-DSCH for the UE. The *HS-DSCH Configured Indicator* IE shall be used for the configuration of the E-DPDCH IQ branch mapping [9].

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
HS-DSCH Configured Indicator			ENUMERATED (HS-	Indicator of the HS-DSCH
			DSCH configured,	forconfiguration of the E-
			HS-DSCH not	DPDCHs IQ branch mapping
			configured)	[9].

# 9.2.2.18D HS-DSCH FDD Information

The *HS-DSCH FDD Information* IE is used for initial addition of HS-DSCH information to a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flows			Reference			
Information	M		9.2.1.31IA		_	
UE Capabilities Information		1			_	
>HS-DSCH Physical Layer	М	,	9.2.1.31la		_	
Category			0.2			
>1.28 Mcps TDD Uplink Physical Channel Capability	0		9.2.3.5Gc	Not to be used.	YES	ignore
>Number of Supported Carriers	0		ENUMERA TED ( One-one carrier, One-three carrier, Three-three carrier, One-six carrier, Three-six carrier, Six-six carrier,)	Not to be used.	YES	reject
MAC-hs Reordering Buffer	М		9.2.1.38Ab		_	
Size for RLC-UM						
CQI Feedback Cycle k	M		9.2.2.21B		_	
CQI Repetition Factor	C- CQICyclek		9.2.2.4Cb		_	
ACK-NACK Repetition Factor	М		9.2.2.a		_	
CQI Power Offset	M		9.2.2.4Ca		_	
ACK Power Offset	M		9.2.2.b		_	
NACK Power Offset	M		9.2.2.23a		_	
HS-SCCH Power Offset	0		9.2.2.181		_	
Measurement Power Offset	0		9.2.2.21C		_	
HARQ Preamble Mode	0		9.2.2.18a		YES	ignore
MIMO Activation Indicator	0		9.2.2.71		YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.31ID	If not present, "Indexed MAC- d PDU Size" shall be used.	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A		YES	ignore
UE without HS-SCCH constraint indicator	0		NULL		YES	ignore
Enhanced HS Serving CC Abort	0		ENUMERA TED (Abort Enhanced HS Serving CC,)	Shall be ignored in Radio Link Setup and Radio Link Addition procedures.	YES	reject

Condition	Explanation
CQICyclek	The IE shall be present if the CQI Feedback Cycle k IE is set to a
	value greater than 0.

# 9.2.2.18Da HS-DSCH FDD Secondary Serving Information

The *HS-DSCH FDD Secondary Serving Information* IE is used for initial addition of Secondary Serving HS-DSCH information to a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset	0		9.2.2.181	
Measurement Power Offset	M		9.2.2.21C	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	
HS-DSCH-RNTI	M		9.2.1.31J	

# 9.2.2.18E HS-DSCH FDD Information Response

The HS-DSCH Information Response provides information for HS-DSCH that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		0 <maxno ofMACdFl ows&gt;</maxno 	Reference		-	
>HS-DSCH MAC-d Flow ID	М		9.2.1.311		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		-	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.31Ha		_	
HS-SCCH Specific Information Response		0 <maxno ofHSSCC Hcodes&gt;</maxno 			_	
>Code Number	М		INTEGER (0127)		_	
HARQ Memory Partitioning	0		9.2.1.102		_	
HARQ Preamble Mode Activation Indicator	0		9.2.2.18b		YES	ignore
MIMO N/M Ratio	0		9.2.2.96		YES	ignore
SixtyfourQAM DL Usage Indicator	0		9.2.2.74B		YES	ignore
HS-DSCH TB Size Table Indicator	0		9.2.2.18Ee		YES	ignore

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes

# 9.2.2.18EA HS-DSCH FDD Secondary Serving Information Response

The HS-DSCH Secondary Serving Information Response provides information for Secondary Serving HS-DSCH that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Specific		0 <maxno< td=""><td></td><td></td></maxno<>		
Secondary Serving		ofHSSCC		
Information Response		Hcodes>		
>Code Number	M		INTEGER (0127)	
SixtyfourQAM DL Usage	0		9.2.2.74B	
Indicator				
HS-DSCH TB Size Table	0		9.2.2.18Ee	
Indicator				

Range Bound	Explanation				
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes				

# 9.2.2.18EB HS-DSCH FDD Secondary Serving Information To Modify

The *HS-DSCH FDD Secondary Serving Information To Modify* IE is used for modification of Secondary Serving HS-DSCH information in a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset	0		9.2.2.18I	
Measurement Power Offset	0		9.2.2.21C	
HS-SCCH Code Change Grant	0		9.2.1.31L	
Sixtyfour QAM Usage Allowed	0		9.2.2.74A	
Indicator				

# 9.2.2.18EC HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised

The HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE is used for modification of Secondary Serving HS-DSCH information in a Node B Communication Context with the Unsynchronised Radio Link Reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
-			Reference	-
HS-SCCH Power Offset	0		9.2.2.181	
Sixtyfour QAM Usage Allowed	0		9.2.2.74A	
Indicator				

#### 9.2.2.18Ea HS-DSCH FDD Update Information

The *HS-DSCH FDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.31K		_	
CQI Feedback Cycle k	0		9.2.2.21B		-	
CQI Repetition Factor	0		9.2.2.4Cb		-	
ACK-NACK Repetition Factor	0		9.2.2.a		_	
CQI Power Offset	0		9.2.2.4Ca		_	
ACK Power Offset	0		9.2.2.b		_	
NACK Power Offset	0		9.2.2.23a		_	
HS-PDSCH Code Change Indicator	0		9.2.1.31M		YES	ignore

# 9.2.2.18Eaa HS-DSCH FDD Secondary ServingUpdate Information

The *HS-DSCH FDD Secondary Serving Update Information* IE provides information for Secondary Serving HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Indicator	0		9.2.1.31K	
HS-PDSCH Code Change Indicator	0		9.2.1.31M	

# 9.2.2.18Eb HS-DSCH Serving Cell Change Information

The HS-DSCH Serving Cell Change Information IE contains information which is used in HS-DSCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-PDSCH RL ID	M		RL ID 9.2.1.53		_	
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.18D		-	
HS-DSCH-RNTI	M		9.2.1.31J		_	
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68		YES	reject

#### 9.2.2.18Ec HS-DSCH Serving Cell Change Information Response

The *HS-DSCH Serving Cell Change Information Response* IE contains information which is used in HS-DSCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Serving Cell					_	
Change						
>Successful						
>>HS-DSCH FDD	M		9.2.2.18E		-	
Information Response						
>>Continuous Packet	0		9.2.2.69		YES	ignore
Connectivity HS-SCCH						
less Information						
Response						
>Unsuccessful						
>>Cause	M		9.2.1.6		_	

#### 9.2.2.18Eca HS-DSCH Secondary Serving Cell Change Information Response

The *HS-DSCH Secondary Serving Cell Change Information Response* IE contains information which is used in HS-DSCH Secondary Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Secondary Serving				
Cell Change				
>Successful				
>>HS-DSCH FDD	M		9.2.2.18EA	
Secondary Serving				
Information Response				
>Unsuccessful			·	
>>Cause	M		9.2.1.6	

# 9.2.2.18Ed E-DCH Serving Cell Change Information Response

The *E-DCH Serving Cell Change Information Response* IE contains information which is used in E-DCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving Cell Change				
>Successful				
>>RL Information Response		0 <maxno ofRLs&gt;</maxno 		
>>>RL ID	M		9.2.1.53	
>>>E-DCH FDD DL	М		9.2.2.13Dc	
Control Channel				
Information				
>Unsuccessful				
>>Cause	M		9.2.1.6	

Range bound	Explanation	
maxnoofRLs	Maximum number of RLs for one UE	

#### 9.2.2.18Ee HS-DSCH TB Size Table Indicator

The HS-DSCH TB Size Table Indicator IE is used to indicate that octet aligned table [32] shall be used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH TB Size Table			ENUMERATED	
Indicator			(octet aligned)	

#### 9.2.2.18F HS-PDSCH FDD Code Information

This parameter defines the codes which will be assigned for HS-PDSCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of HS-PDSCH Codes	M		INTEGER	
			(0maxHS-PDSCHC	
			odeNrComp-1)	
Start Code Number	C-		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&gt;</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 except when FDPCH is configured. When F-DPCH is configured, the *HS-SCCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset			INTEGER (0255)	Unit: dB Range: -32 +31.75 dB Step: 0.25 dB

# 9.2.2.18K Initial DL DPCH Timing Adjustment Allowed

The *Initial DL DPCH Timing Adjustment Allowed* IE indicates that the Node B is allowed to perform a timing adjustment (either a timing advance or a timing delay with respect to the SFN timing) when establishing a radio link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Initial DL DPCH Timing			ENUMERATED (	
Adjustment Allowed			initial DL DPCH	
			Timing Adjustment	
			Allowed)	

# 9.2.2.19 Max Adjustment Period

Void.

#### 9.2.2.20 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots that can be utilised by the downlink power balancing algorithm. *Max Adjustment Step* IE defines a time period, in terms of number of slots, in which the accumulated power adjustment shall be maximum 1dB. This value does not include the DL inner loop PC adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Adjustment Step			INTEGER (110)	Unit: Slots

9.2.2.20A Max Number Of PCPCHs

Void.

9.2.2.20B Max Number Of UL E-DPDCHs

Void.

#### 9.2.2.20C Maximum Set of E-DPDCHs

The Maximum Set of E-DPDCHs as defined in [8]. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Maximum Set of E-DPDCHs			ENUMERATED	
			(vN256, vN128,	
			vN64, vN32, vN16,	
			vN8, vN4, v2xN4,	
			v2xN2,	
			v2xN2plus2xN4,,	
			v2xM2plus2xM4)	

9.2.2.20D Maximum Number Of Retransmissions For E-DCH

Void

9.2.2.20E MAC-es Guaranteed Bit Rate

Void

9.2.2.20F MAC-e Reset Indicator

Void

#### 9.2.2.21 Maximum Number Of UL DPDCHs

Maximum number of uplink DPDCHs to be used during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of UL DPDCHs			INTEGER (16)	

#### 9.2.2.21a Maximum Target Received Total Wide Band Power

The Maximum Target Received Total Wide Band Power indicates the maximum target UL interference for a certain cell under CRNC, including received wide band power from all sources.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Target Received Total Wide Band Power			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in [22].

#### 9.2.2.21b Target Non-serving E-DCH to Total E-DCH Power Ratio

The Target Non-serving E-DCH to Total E-DCH Power Ratio indicates the target ratio of the received E-DCH power from non-serving UEs to the received total E-DCH power.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Target Non-serving E-DCH to Total E-DCH Power Ratio			INTEGER (0100)	Unit: % Range: 0100 % Step: 1 %

#### 9.2.2.21A Maximum PDSCH Power

Void.

#### 9.2.2.21B CQI Feedback Cycle k

The CQI Feedback Cycle k IE provides the duration of the CQI feedback cycle.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Feedback Cycle k			ENUMERATED (0, 2, 4, 8, 10, 20, 40, 80, 160,, 16, 32, 64)	Unit ms

# 9.2.2.21C Measurement Power Offset

The Measurement Power Offset IE is used as described in ref [10] subclause 6A.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Power Offset			INTEGER (-1226)	Unit: dB Range: -613dB Step: 0.5dB

# 9.2.2.21D MICH Mode

The number of Notification Indicators (NIs) transmitted in a MICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MICH Mode			ENUMERATED (18, 36, 72, 144,, 16, 32,64,128)	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 Length			ENUMERATED (4, 8, 16, 32, 64,	
20119411			128, 256,)	

# 9.2.2.22a Min UL Channelisation Code Length For E-DCH FDD

Void.

# 9.2.2.23 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiplexing Position			ENUMERATED (	
			Fixed,	
			Flexible)	

#### 9.2.2.23a NACK Power Offset

The NACK Power Offset IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ NACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
NACK Power Offset			INTEGER (08,)	According to mapping in ref. [9] subclause 4.2.1.

9.2.2.23A N EOT

Void.

9.2.2.23B NF\_max

Void.

# 9.2.2.23C N\_Start\_Message

Void.

# 9.2.2.23D Number Of Reported Cell Portions

Number of Reported Cell Portions indicates the number of Best Cell Portions values which shall be included in the measurement report.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Reported Cell			INTEGER (164,)	
Portions				

# 9.2.2.24 Pattern Duration (PD)

Void.

# 9.2.2.24A PCP Length

Void.

# 9.2.2.25 PDSCH Code Mapping

Void.

#### 9.2.2.26 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PICH Mode			ENUMERATED	Number of Pls per frame
			(18, 36, 72, 144,)	

# 9.2.2.27 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type			ENUMERATED (	
			None,	
			Common,	
			Individual)	

#### 9.2.2.28 Power Control Mode

Void.

#### 9.2.2.29 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPDCH in case the Node B Communication Context is configured to use DPCH in the downlink or relative to a Secondary CCPCH data field.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER (024)	Unit: dB
				Range: 06 dB
				Step: 0.25 dB

#### 9.2.2.29A Power\_Raise\_Limit

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power_Raise_Limit			INTEGER (010)	Unit: dB
				Range: 010 dB
				Step: 1 dB

#### 9.2.2.30 Power Resume Mode

Void.

#### 9.2.2.31 Preamble Signature

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Signatures			BIT STRING (16)	Each bit indicates availability for a signature, where the signatures are numbered "signature 0" up to "signature 15". The value 1 of a bit indicates that the corresponding signature is available and the value 0 that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [9].

#### 9.2.2.32 Preamble Threshold

The IE sets the threshold for preamble detection. The ratio between received preamble power during the preamble period and interference level shall be above this threshold in order to be acknowledged.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Preamble Threshold			INTEGER (072)	Unit: dB Range: -36 0 dB Step: 0.5 dB

# 9.2.2.33 Primary CPICH Power

The Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CPICH, the Primary CPICH power is the linear sum of the power that is used for transmitting the Primary CPICH on all branches.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Primary CPICH Power			INTEGER	Value = Primary CPICH
			(-100500)	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. If the range of the *Propagation Delay* IE is insufficient to represent the measured value, the *Propagation Delay* IE shall be set to its maximum value, and the *Extended Propagation Delay* IE shall be used to represent the propagation delay value, see subclause 9.2.2.35A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER (0255)	Unit: chip Range: 0765 chips
				Step: 3 chips

# 9.2.2.35A Extended Propagation Delay

The Extended Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B. It shall be used if the *Propagation Delay* IE (see 9.2.2.35) cannot represent the measured value, due to range limitation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Propagation Delay			INTEGER (2551023)	Continuation of intervals as defined in [22]. Unit: chip Range: 7653069 chips Step: 3 chips

#### 9.2.2.36 QE-Selector

Void.

#### 9.2.2.36A Qth Parameter

Void.

#### 9.2.2.37 RACH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Slot Format			ENUMERATED (03,)	See ref. [7].

#### 9.2.2.38 RACH Sub Channel Numbers

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RACH Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4.

#### 9.2.2.39 RL Set ID

The RL Set ID uniquely identifies one RL Set within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER (031)	

# 9.2.2.39a RL Specific E-DCH Information

The RL Specific E-DCH Information IE provides RL specific E-DCH Information.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Specific E-DCH Information		1 <maxno ofEDCHM ACdFlows &gt;</maxno 		
>E-DCH MAC-d Flow ID	М		9.2.1.74	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
E-AGCH Power Offset	0		9.2.2.13ld	
E-RGCH Power Offset	0		9.2.2.13le	
E-HICH Power Offset	0		9.2.2.13lf	

	Range Bound	Explanation
maxno	oofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

#### 9.2.2.39A Received Total Wide Band Power

The Received total wide band power indicates the UL interference at a certain cell under CRNC, see ref. [4].

Presence	Range	IE Type and Reference	Semantics Description
		INTEGER (0621)	According to mapping in [22].
	Tesenice	Treserice Trainge	Reference

#### 9.2.2.39B Reference Received Total Wide Band Power

When sent by the CRNC, the Reference Received Total Wide Band Power indicates the reference UL interference (received noise level) for a certain cell under CRNC. This value may be used for E-DCH scheduling in the Node B.

When reported by the Node B, the Reference Received Total Wide Band Power indicates the reference UL interference (received noise level as an estimate of the noise floor) estimate from the Node B. This value may be used, e.g. for admission or congestion control in the CRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Received Total Wide Band Power			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in [22].

#### 9.2.2.39C Reference Received Total Wide Band Power Reporting

The Reference Received Total Wide Band Power Reporting controls the indication of the Reference Received Total Wide Band Power estimate from the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Received Total			ENUMERATED	
Wide Band Power Reporting			(Reference	
, -			Received Total Wide	
			Band Power	
			Requested)	

#### 9.2.2.39D Reference Received Total Wide Band Power Support Indicator

The Reference Received Total Wide Band Power Support Indicator indicates whether indication of Reference Received Total Wide Band Power is supported by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Received Total Wide Band Power Support			ENUMERATED (Indication of	
Indicator			Reference Received	
			Total Wide Band	
			Power supported)	

9.2.2.40 S-Field Length

Void.

9.2.2.40A Scheduling Information

Void

9.2.2.41 Scrambling Code Change

Void.

# 9.2.2.42 Scrambling Code Number

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scrambling Code Number			INTEGER (015)	Identification of scrambling code see ref. [9].

# 9.2.2.43 Secondary CCPCH Slot Format

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary CCPCH Slot			INTEGER (017,)	
Format				

# 9.2.2.43A Secondary CPICH Information Change

The *Secondary CPICH Information Change* IE indicates modification of information of the Secondary CPICH for channel estimation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Secondary CPICH Information Change	М			
>New Secondary CPICH				
>>Secondary CPICH Information	М		Common Physical Channel ID 9.2.1.13	
>Secondary CPICH Shall Not Be Used			NULL	

9.2.2.44 SSDT Cell Identity

Void.

9.2.2.44A SSDT Cell Identity For EDSCHPC

Void.

# 9.2.2.45 SSDT Cell ID Length

Void.

# 9.2.2.46 SSDT Support Indicator

The SSDT Support Indicator indicates whether a RL supports SSDT or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SSDT Support Indicator			ENUMERATED ( Not Used, SSDT Not Supported)	The SSDT Support Indicator IE shall never be set to 'Not Used'. If received it shall be rejected.

#### 9.2.2.47 SSDT Indication

Void.

#### 9.2.2.48 STTD Indicator

Indicates if STTD shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Indicator			ENUMERATED ( active, inactive,)	

# 9.2.2.48A Synchronisation Indicator

The *Synchronisation Indicator* IE indicates that Timing Maintained Synchronisation shall be used at start of Radio Link, see also [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Indicator			ENUMERATED	
•			(Timing Maintained	
			Synchronisation,)	

# 9.2.2.48B Serving E-DCH RL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving E-DCH RL	M			
>Serving E-DCH RL in this Node B				
>>Serving E-DCH RL ID	М		RL ID 9.2.1.53	
>Serving E-DCH RL not in this Node B			NULL	

#### 9.2.2.49 T Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T Cell			ENUMERATED (0, 1,,9)	Unit: chip Range: 02304 chips Step: 256 chips See ref. [17]

#### 9.2.2.49A TFCI2 Bearer Information Response

Void.

#### 9.2.2.50 TFCI Signalling Mode

This parameter indicates if the normal or split mode is used for the TFCI. In the event that the split mode is to be used then the IE indicates whether the split is "Hard" or "Logical", and in the event that the split is "Logical" the IE indicates the number of bits in TFCI (field 2).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Signalling Option	M		ENUMERATED ( Normal, Not Used)	The value "Not Used" shall not be used by the CRNC. The procedure shall be rejected by the Node B if the value "Not Used" is received.
Not Used	0		NULL	
Not Used	0	•	NULL	

9.2.2.51 TGD

Void.

9.2.2.52 TGL

Void.

### 9.2.2.53 Transmit Diversity Indicator

The Transmit Diversity Indicator indicates whether transmit diversity shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmit Diversity Indicator			ENUMERATED ( active, inactive)	

#### 9.2.2.53A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Information		1 <maxt GPS&gt;</maxt 		
>TGPS Identifier	M	<i>G. G.</i>	INTEGER (1maxTGPS)	Transmission Gap Pattern Sequence Identifier: Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be used.</maxtgps>
>TGSN	М		INTEGER (014)	Transmission Gap Starting Slot Number: The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		INTEGER (114)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	0		INTEGER (114)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		INTEGER (0, 15 269)	Transmission Gap Distance: indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to "0" ("0" =undefined).
>TGPL1	M		INTEGER (1144,)	The duration of transmission gap pattern 1 in frames.
>Not-to-be-used-1	0		INTEGER (1144,)	This IE shall never be included in the IE group. If received it shall be ignored.
>UL/DL Mode	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 ( Not Used, SF/2, Higher Layer Scheduling,)	Method for generating downlink compressed mode gap.The <i>Downlink Compressed Mode Method</i> IE shall never be set to 'Not Used'.
>Uplink Compressed Mode Method	C-UL		ENUMERATED ( SF/2, Higher Layer Scheduling, )	Method for generating uplink compressed mode gap.
>Downlink Frame Type	М		ENUMERATED (A, B,)	Defines if frame structure type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		INTEGER (030)	Delta in SIR target value to be set in the Node B during the frame containing the start of the first transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase). Unit: dB Range: 03 dB Step: 0.1 dB

>DeltaSIRafter1	M	INTEGER (030)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the first transmission gap in the transmission gap pattern. Unit: dB Range: 03 dB Step: 0.1 dB
>DeltaSIR2	0	INTEGER (030)	Delta in SIR target value to be set in the Node B during the frame containing the start of the second transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase).  When omitted, DeltaSIR2 = DeltaSIR1. Unit: dB Range: 03 dB Step: 0.1 dB
>DeltaSIRafter2	0	INTEGER (030)	Delta in SIR target value to be set in the Node B one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. When omitted, DeltaSIRafter2 = DeltaSIRafter1. Unit: dB Range: 03 dB Step: 0.1 dB

Condition	Explanation
UL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "UL only" or "UL/DL".
DL	The IE shall be present if the <i>UL/DL mode</i> IE is set to "DL only" or "UL/DL".

Range Bound	Explanation
maxTGPS	Maximum number of transmission gap pattern sequences

# 9.2.2.53B Transmission Gap Pattern Sequence Code Information

This IE indicates whether the alternative scrambling code shall used for the Downlink compressed mode method or not in the Transmission Gap Pattern Sequence. For details see [9].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Transmission Gap Pattern Sequence Code Information			ENUMERATED ( Code Change, No Code Change)	Indicates whether the alternative scrambling code is used for compressed mode method "SF/2".

# 9.2.2.54 UL/DL compressed mode selection

Void.

9.2.2.55 UL delta SIR

Void.

9.2.2.56 UL delta SIR after

Void.

## 9.2.2.57 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to ref. [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPCCH Slot Format			INTEGER (05,)	Value 5 shall not be used.
				If value 5 is received, the
				procedure shall be rejected.

9.2.2.58 UL SIR

Void.

# 9.2.2.59 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Scrambling Code Number	M		INTEGER (02 <sup>24</sup> -1)	
UL Scrambling Code Length	M		ENUMERATED (	
			Short,	
			Long)	

9.2.2.60 UL Capacity Credit

Void.

# 9.2.2.61 UL DPDCH Indicator For E-DCH Operation

The UL DPDCH Indicator For E-DCH Operation parameter indicates whether some UL DPCH parameters should be ignored or not in the message in which the *UL DPDCH Indicator For E-DCH Operation* IE was included or that any UL DPDCH resources shall be removed from the communication context configuration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPDCH Indicator For E-			ENUMERATED (	
DCH Operation			UL-DPDCH present,	
			UL-DPDCH not	
			present)	

# 9.2.2.62 Fast Reconfiguration Mode

The Fast Reconfiguration Mode IE is used to notify the Node B that the SRNC would like to use the activation time 'when the UE is detected on the new configuration' as the timing for the reconfiguration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Fast Reconfiguration Mode			ENUMERATED ( Fast,)	

## 9.2.2.63 Fast Reconfiguration Permission

The Fast Reconfiguration Permission IE is used to indicate to the CRNC that the Node B can apply the activation time 'when the UE is detected on the new configuration' for this reconfiguration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Fast Reconfiguration			ENUMERATED (	
Permission			Allowed,)	

## 9.2.2.64 Continuous Packet Connectivity DTX-DRX Capability

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Continuous Packet			ENUMERATED	
Connectivity DTX-DRX			(Continuous Packet	
Capability			Connectivity DTX-	
			DRX Capable,	
			Continuous Packet	
			Connectivity DTX-	
			DRX Non-Capable)	

# 9.2.2.65 Continuous Packet Connectivity HS-SCCH less Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Continuous Packet Connectivity HS-SCCH less Capability			ENUMERATED (Continuous Packet Connectivity HS- SCCH less Capable, Continuous Packet Connectivity HS- SCCH less Non- Capable)	

## 9.2.2.66 Continuous Packet Connectivity DTX-DRX Information

The *Continuous Packet Connectivity DTX-DRX Information* IE defines the parameters used for Continuous Packet Connectivity DTX-DRX operation (see ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	М		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI
Enabling Delay	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames
DTX Information		1		
>CHOICE E-DCH TTI	M			

Length				
>>2ms				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes
>>>UE DTX Cycle 2	М		ENUMERATED (4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160)	Units of subframes
>>>MAC DTX Cycle	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes
>>10ms				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 5, 10, 20)	Units of subframes
>>>UE DTX Cycle 2	М		ENUMERATED (5, 10, 20, 40, 80, 160)	Units of subframes
>>>MAC DTX Cycle	М		ENUMERATED (5, 10, 20)	Units of subframes
>Inactivity Threshold for UE DTX Cycle 2	M		ENUMERATED (1, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs
>UE DTX Long Preamble	М		ENUMERATED (2,4,15)	Units of slots
>MAC Inactivity Threshold	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of E-DCH TTIs
>CQI DTX Timer	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of subframes
>UE DPCCH burst1	М		ENUMERATED (1, 2, 5)	Units of subframes
>UE DPCCH burst2	М		ENUMERATED (1, 2, 5)	Units of subframes
DRX Information		01		
>UE DRX Cycle	М		ENUMERATED (4, 5, 8, 10, 16, 20)	Units of subframes
>Inactivity Threshold for UE DRX Cycle	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512)	Units of subframes
>Inactivity Threshold for UE Grant Monitoring	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs
>UE DRX Grant Monitoring	М		BOOLEAN	True: DRX Grant Monitoring shall be applied. False: DRX Grant Monitoring shall not be applied.

# 9.2.2.67 Continuous Packet Connectivity DTX-DRX Information To Modify

The *Continuous Packet Connectivity DTX-DRX Information To Modify* IE is used for modification of Continuous Packet Connectivity DTX-DRX information in a Node B Communication Context. The *Continuous Packet Connectivity DTX-DRX Information To Modify* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	0		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI
Enabling Delay	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames
CHOICE DTX Information To Modify	0			
>Modify				
>>CHOICE E-DCH TTI	0			

Length			
>>>2ms			
>>>UE DTX Cycle 1	М	ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes
>>>UE DTX Cycle 2	M	ENUMERATED (4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160)	Units of subframes
>>>MAC DTX Cycle	M	ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes
>>>10ms			
>>>UE DTX Cycle 1	M	ENUMERATED (1, 5, 10, 20)	Units of subframes
>>>>UE DTX Cycle 2	M	ENUMERATED (5, 10, 20, 40, 80, 160)	Units of subframes
>>>>MAC DTX Cycle	M	ENUMERATED (5, 10, 20)	Units of subframes
>>Inactivity Threshold for UE DTX Cycle 2	0	ENUMERATED (1, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs
>>UE DTX Long Preamble	0	ENUMERATED (2,4,15)	Units of slots
>>MAC Inactivity Threshold	0	ENUMERATED (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of E-DCH TTIs
>>CQI DTX Timer	0	ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of Subframes
>>UE DPCCH burst1	0	ENUMERATED (1, 2, 5)	Units of Subframes
>>UE DPCCH burst2	0	ENUMERATED (1, 2, 5) NULL	Units of Subframes
>Deactivate		NULL	
CHOICE DRX Information To Modify	0		
>Modify	_		
>>UE DRX Cycle	0	ENUMERATED (4, 5, 8, 10, 16, 20)	Units of subframes
>>Inactivity Threshold for UE DRX Cycle	0	ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512)	Units of subframes
>>Inactivity Threshold for UE Grant Monitoring	0	ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs
>>UE DRX Grant Monitoring	0	BOOLEAN	True: DRX Grant Monitoring shall be applied. False: DRX Grant Monitoring shall not be applied.
>Deactivate		NULL	

# 9.2.2.68 Continuous Packet Connectivity HS-SCCH less Information

The *Continuous Packet Connectivity HS-SCCH less Information* IE defines the parameters used for Continuous Packet Connectivity HS-SCCH less operation (see ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1 <maxno ofHS- DSCHTBS sHS- SCCHless &gt;</maxno 		
>Transport Block Size Index	М		INTEGER	

		(1maxnoofHS-DSC HTBSs)	
>HS-PDSCH Second Code Support	М	BOOLEAN	True = The second HS- PDSCH code shall also be used False = The second HS- PDSCH code shall not be used

Range Bound	Explanation		
maxnoofHS-DSCHTBSsHS-SCCHless	Maximum number of HS-DSCH Transport Block Sizes used for HS-SCCH-less operation		
maxnoofHS-DSCHTBSs	Maximum number of HS-DSCH Transport Block Sizes		

## 9.2.2.69 Continuous Packet Connectivity HS-SCCH less Information Response

The *Continuous Packet Connectivity HS-SCCH less Information Response* IE provides information for HS-SCCH less operation determined within the Node B (see ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH First Code Index	М		INTEGER (1maxHS-PDSCHC odeNrComp-1)	Index of first HS-PDSCH code
HS-PDSCH Second Code Index	0		INTEGER (1maxHS-PDSCHC odeNrComp-1)	Index of second HS-PDSCH code

# 9.2.2.69A Continuous Packet Connectivity HS-SCCH less Deactivate Indicator

The Continuous Packet Connectivity HS-SCCH less Deactivate Indicator IE is used to deactivate HS-SCCH less operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Continuous Packet	М		NULL	
Connectivity HS-SCCH less				
Deactivate Indicator				

Range Bound	Explanation			
maxHS-PDSCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the			
	complete code tree			

## 9.2.2.70 MIMO Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Capability			ENUMERATED	
			(MIMO Capable,	
			MIMO Non-Capable)	

### 9.2.2.71 MIMO Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Activation Indicator	M		NULL	

### 9.2.2.72 MIMO Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Mode Indicator			ENUMERATED	
			(Activate,	
			Deactivate)	

## 9.2.2.73 MIMO Pilot Configuration

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Pilot Configuration	M			
>Primary and Secondary CPICH				
>>Associated Secondary CPICH	M		Common Physical Channel ID 9.2.1.13	
>Normal and Diversity Primary CPICH			NULL	

# 9.2.2.74 SixtyfourQAM DL Capability

Void.

# 9.2.2.74A Sixtyfour QAM Usage Allowed Indicator

The Sixtyfour QAM Usage Allowed Indicator IE indicates whether the Node B is allowed to use 64 QAM modulation for HS-DSCH transmission or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sixtyfour QAM Usage Allowed Indicator	M		ENUMERATED (Allowed, Not- Allowed)	

## 9.2.2.74B SixtyfourQAM DL Usage Indicator

The SixtyfourQAM DL Usage Indicator IE indicates if the Node B is using 64 QAM modulation for the HS-DSCH transmission, or if the Node B is not using 64 QAM modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL Usage			ENUMERATED	
Indicator			(SixtyfourQAM DL	
			Used, SixtyfourQAM	
			DL Not Used)	

# 9.2.2.75 HS-DSCH Common System Information

The *HS-DSCH Common System Information* IE provides information for HS-DSCH configured for UE in Cell\_FACH, in Cell\_PCH and in URA\_PCH and Information related to BCCH modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Common Information		01		
>CCCH Priority Queue ID	М		Priority Queue ID 9.2.1.49C	
>SRB#1 Priority Queue ID	М		Priority Queue ID 9.2.1.49C	
>Associated Common MAC Flow	M		Common MAC Flow ID 9.2.2.79	The Common MAC Flow ID shall be one of the flow IDs defined in the Common MAC Flow Specific Information of this IE or shall only refer to a Common MAC flow already existing in the old configuration.
>FACH Measurement Occasion Cycle Length Coefficient	0		9.2.2.82	
>RACH Measurement Result	M		9.2.2.84	
>BCCH Specific HS-DSCH- RNTI Information	М		9.2.2.85	
Common MAC Flow Specific Information		0 <maxno ofCommon MACFlows</maxno 		
>Common MAC Flow ID	М		9.2.2.79	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>Common MAC Flow Priority Queue Information		0 <maxno ofCommon MACQueu es&gt;</maxno 		
>>Priority Queue Information for Enhanced FACH	М		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>Transport Bearer Request Indicator	0		9.2.1.62A	Shouldn"t be contained if the MAC flow is setup in procedure. Should be contained if the MAC flow is modified in procedure

Range bound	Explanation		
maxnoofCommonMACFlows	Maximum number of Common MAC Flows		
maxnoofCommonMACQueues	Maximum number of Priority Queues for Common MAC Flow		

# 9.2.2.76 HS-DSCH Paging System Information

The HS-DSCH Paging System Information IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information		1 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	M		9.2.1.113	
>HSDPA Associated PICH Information	М		9.2.2.81	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>ToAWS	M		9.2.1.61	
>ToAWE	M		9.2.1.60	
>Paging MAC Flow Priority Queue Information		0 <maxno ofPagingM ACQueues &gt;</maxno 		
>>Priority Queue Information for Enhanced PCH	M		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>>Transport Bearer Request Indicator	0		9.2.1.62A	Shouldn"t be contained if the MAC flow is setup in procedure. Should be contained if the MAC flow is modified in procedure
HS-SCCH Power	М		DL Power 9.2.1.21	
HS-PDSCH Power	M		DL Power 9.2.1.21	
Number of PCCH transmissions	М		INTEGER (15)	Number of subframes used to transmit the PCCH.
Transport Block Size List		1 <maxno ofHS- DSCHTBS sE-PCH&gt;</maxno 		
>Transport Block Size Index for Enhanced PCH	М		INTEGER (132)	Index of the value range 1 to 32 of the MAC-ehs transport block size as specified in appendix A of [32]

Range bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows
maxnoofPagingMACQueues	Maximum number of Priority Queues for Paging MAC Flow
maxnoofHS-DSCHTBSsE-PCH	Maximum number of HS-DSCH Transport Block Sizes used for
	Enhanced PCH operation associated HS-SCCH less

# 9.2.2.77 HS-DSCH Common System Information Response

The *HS-DSCH Common System Information Response* IE provides information for HS-DSCH configured for UE not in Cell\_DCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS-SCCH Specific Information Response		0 <maxno ofHSSCC Hcodes&gt;</maxno 		Channelization codes on HS-SCCH is transmitted for UE not in Cell_DCH
>Code Number	M		INTEGER (0127)	First indexed HS-SCCH Channelisation code should be used for the BCCH specific H-RNTI.

HARQ Memory Partitioning	0		9.2.1.102	
Common MAC Flow Specific Information Response		0 <maxno ofCommon MACFlows &gt;</maxno 		
>Common MAC Flow ID	M		9.2.2.79	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.31Ha	

Range Bound	Explanation		
maxnoofCommonMACFlows	Maximum number of Common MAC Flows		
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes		

# 9.2.2.78 HS-DSCH Paging System Information Response

The *HS-DSCH Paging System Information Response* IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information Response		1 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	M		9.2.1.113	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-PDSCH Code Index	М		INTEGER (1maxHS- PDSCHCod eNrComp- 1)	Index of HS-PDSCH code

Range bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows

### 9.2.2.79 Common MAC Flow ID

Common MAC Flow ID is the unique identifier for one Common MAC flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flow ID			INTEGER	
			(07)	

# 9.2.2.80 Paging MAC Flow ID

Void.

### 9.2.2.81 HSDPA Associated PICH Information

The HSDPA Associated PICH Information IE provides information for PICH used for Enhanced PCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE HSDPA PICH				

>Shared with PCH			
>>Common Physical Channel ID	М	9.2.1.13	
>Not shared with PCH			
>>Common Physical Channel ID	М	9.2.1.13	
>>FDD DL Channelisation Code Number	М	9.2.2.14	
>>PICH Power	M	9.2.1.49A	
>>PICH Mode	M	9.2.2.26	Number of PI per frame
>>STTD Indicator	M	9.2.2.48	

9.2.2.82 FACH Measurement Occasion Cycle Length Coefficient

Void.

9.2.2.83 Priority Queue Information for Enhanced FACH/PCH

Void.

# 9.2.2.84 RACH Measurement Result

The RACH Measurement Result identifies which RACH measurement result is forwarded to Node B in Frame Protocol.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
RACH Measurement Result			ENUMERATED	
			(CPICH Ec/No,	
			CPICH RSCP,	
			Pathloss,)	

## 9.2.2.85 BCCH Specific HS-DSCH RNTI Information

The BCCH Specific HS-DSCH RNTI Information IE provides information for BCCH Transmission using HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BCCH Specific HS-DSCH RNTI	М		HS-DSCH- RNTI 9.2.1.31J	
HS-SCCH Power	M		DL Power 9.2.1.21	
HS-PDSCH Power	М		DL Power 9.2.1.21	

9.2.2.86 Enhanced FACH Capability

Void.

9.2.2.87 Enhanced PCH Capability

Void.

9.2.2.88 SixteenQAM UL Capability

This parameter defines the SixteenQAM uplink capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SixteenQAM UL Capability			ENUMERATED	
			(SixteenQAM UL	
			Capable,	
			SixteenQAM UL	
			Non-Capable)	

# 9.2.2.88A SixteenQAM UL Operation Indicator

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SixteenQAM UL Operation			ENUMERATED	
Indicator			(Activate,	
			Deactivate)	

## 9.2.2.88B E-TFCI Boost Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TFCI BetaEC Boost	M		INTEGER (0127,)	E-TFCI threshold beyond which boosting of E-DPCCH is enabled
UL Delta T2TP	C-E- TFClboost 127		INTEGER (06,)	Total E-DPDCH power across all codes to the combined power of DPCCH and E-DPCCH

Condition	Explanation
E-TFClboost127	The IE shall be present if the E-TFCI BetaEC Boost
	IE value is not set o 127.

# 9.2.2.89 SixteenQAM UL Information

Void.

# 9.2.2.90 SixteenQAM UL Information To Modify

Void.

# 9.2.2.91 Modulation Power Offset

Indicates the modulation, and power offset in case of 16QAM, to be used for the Secondary CCPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Modulation	М			
>QPSK			NULL	
>QAM				
>>CPICH Secondary CCPCH Power Offset	M		INTEGER (-114,)	Power offset between CPICH and secondary CCPCH. Unit: dB Range: -11 +4 dB Step: 1 dB

# 9.2.2.92 Extended Secondary CCPCH Slot Format

Indicates the slot format used for the Secondary CCPCH. The extended slot format shall only be used for MBSFN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Secondary CCPCH Slot Format			INTEGER(1823,)	

## 9.2.2.93 F-DPCH Slot Format

The *F-DPCH Slot Format* IE defines the F-DPCH slot format for the TPC bits, as defined in [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format			INTEGER (09)	

# 9.2.2.94 F-DPCH Slot Format Capability

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format Capability			ENUMERATED (F- DPCH Slot Format Capable, F-DPCH Slot Format Non- Capable)	

# 9.2.2.95 Max UE DTX Cycle

The *Max UE DTX Cycle* IE defines the maximum UE DTX cycle supported by the Node B for Continuous Packet Connectivity DTX-DRX operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max UE DTX Cycle	M		ENUMERATED (v5,	Units of subframes
			v10, v20, v40, v64,	
			v80, v128, v160,)	

## 9.2.2.96 MIMO N/M Ratio

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO N/M Ratio	М		ENUMERATED (1/2, 2/3, 3/4, 4/5, 5/6, 6/7, 7/8, 8/9, 9/10, 1/1,)	

## 9.2.2.97 Common MAC Flows To Delete

The Common MAC Flows To Delete IE is used for the removal of Common MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flows To Delete		1 <maxno ofCommon MACFlows &gt;</maxno 		
>Common MAC Flow ID	M		9.2.2.79	

Range Bound	Explanation
maxnoofCommonMACFlows	Maximum number of Common MAC Flows

# 9.2.2.98 Paging MAC Flows To Delete

The Paging MAC Flows To Delete IE is used for the removal of Paging MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flows To Delete		1 <maxno< th=""><th></th><th></th></maxno<>		
		ofPagingM		
		ACFlow>		
>Paging MAC Flow ID	M		9.2.1.113	

Range Bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows

## 9.2.2.99 MAC-ehs Reset Timer

Void.

# 9.2.2.100 E-AGCH Table Choice

The E-AGCH Table Choice IE indicates the choice of the E-AGCH table in[8].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-AGCH Table Choice	M		ENUMERATED	Table 16B indicates the Table
			(Table 16B, Table	16B: Mapping of Absolute
			16B-12,)	Grant Value in [8] and Table
				16B-12 indicates the Table
				16B.12: Alternative Mapping of
				Absolute Grant Value in [8].

# 9.2.2.101 Common E-DCH Capability

This parameter defines the Common E-DCH capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH Capability			ENUMERATED (Common E-DCH Capable, Common E-DCH non Capable)	

# 9.2.2.102 E-Al Capability

This parameter defines the Common E-DCH capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-Al Capability			ENUMERATED (E-	
			Al Capable, E-Al	
			non Capable)	

# 9.2.2.103 Common E-DCH System Information

The *Common E-DCH System Information* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH UL DPCH Information		01		
>UL DPCCH Slot Format	M		9.2.2.57	
>UL SIR Target	М		UL SIR 9.2.1.67A	
>DPC Mode	0		9.2.2.13C	
Common E-DCH E-DPCH		01		
Information				
>Maximum Set of E- DPDCHs	M		9.2.2.20C	
>Puncture Limit	M		9.2.1.50	
>E-TFCS Information	M		9.2.2.13Dh	
>E-TTI	M		9.2.2.13Di	
>E-DPCCH Power Offset	M		9.2.2.13Dj	
>E-RGCH 2-Index-Step Threshold	0		9.2.2.13lg	
>E-RGCH 3-Index-Step	0		9.2.2.13lh	
Threshold				
>HARQ Info for E-DCH	М		9.2.2.18ba	
Common E-DCH Information		01		
>E-DCH Reference Power Offset	0		9.2.2.13Y	
>E-DCH Power Offset for Scheduling Info	0		9.2.1.85	
>Maximum E-DCH resource allocation for CCCH	M		ENUMERATED (8, 12, 16, 24, 32, 40, 80, 120,)	Interms of TTIs
>Maximum period for collision resolution phase	M		INTEGER(824,)	Interms of TTIs
>Maximum TB Sizes	0		9.2.2.106	
>Common E-DCH implicit release indicator	М		BOOLEAN	TRUE means implicit release is in use. FALSE means implicit release is not in use.
Common E-DCH HS-DSCH Information		01		
>CQI Feedback Cycle k	М		9.2.2.21B	
>CQI Repetition Factor	C- CQICyclek		9.2.2.4Cb	
>ACK-NACK Repetition Factor	М		9.2.2.a	
>CQI Power Offset	М		9.2.2.4Ca	
>ACK Power Offset	М		9.2.2.b	
>NACK Power Offset	М		9.2.2.23a	
>Measurement Power Offset	М		9.2.2.21C	
Common E-DCH Preamble Control Information		01		
>Common E-DCH Preamble	М		Preamble Signatures	
Signature >Scrambling Code Number	M		9.2.2.31 9.2.2.42	
>E-Al Indicator	0		BOOLEAN	TRUE means E-Als are in use on the AICH. FALSE means E-Als are not in use on the AICH.

>Common E-DCH AICH Information		01		
>>Common Physical Channel ID	М		9.2.1.13	
>>AICH Transmission Timing	М		9.2.2.1	
>>FDD DL Channelisation Code Number	М		9.2.2.14	
>>AICH Power	M		0220	
>>STTD Indicator	M		9.2.2.D	
	IVI		9.2.2.48	
Common E-DCH F-DPCH Information		01		
>F-DPCH slot format	М		9.2.2.93	
>FDD TPC DL Step Size	М		9.2.2.16	
Common E-DCH Resource Combination Information		0 <maxno ofCommon EDCHs&gt;</maxno 		
>Soffset	М		INTEGER (09,)	
>F-DPCH DL Code Number	М		FDD DL Channelisation Code Number 9.2.2.14	
>UL DPCH Scrambling Code	М		UL Scrambling Code 9.2.2.59	
>E-RGCH/E-HICH Channelisation Code	M		FDD DL Channelisation Code Number 9.2.2.14	
>E-RGCH Signature Sequence	0		INTEGER (0maxnoofSigSeqE -RGHICH - 1)	
>E-HICH Signature Sequence	M		INTEGER (0maxnoofSigSeqE -RGHICH - 1)	
UL Common MAC Flow Specific Information		0 <maxno ofCommon MACFlows &gt;</maxno 		
>UL Common MAC Flow ID	М		Common MAC Flow ID	
Transport Degrar Degraet			9.2.2.79	
>Transport Bearer Request Indicator >Binding ID	M		9.2.1.62A	Chall be ignered if he area
	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
> Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>Payload CRC Presence Indicator	М		9.2.1.49	

>Bundling Mode Indicator	0	9.2.2.1Bb	
>Common E-DCH MAC-d Flow Specific Information	М	9.2.2.105	

Condition	Explanation
CQICyclek	The IE shall be present if the CQI Feedback Cycle k IE is set to a
	value greater than 0.

Range bound	Explanation
maxnoofCommonMACFlows	Maximum number of Common MAC Flows
maxnoofCommonEDCHs	Maximum number of Common E-DCH Resource Combination for a
	cell

# 9.2.2.104 Common E-DCH System Information Response

The *Common E-DCH System Information Response* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Common MAC Flow		1 <maxno< td=""><td></td><td></td></maxno<>		
Specific Information		ofEDCHM		
Response		ACFlows>		
>UL Common MAC Flow ID	M		Common MAC Flow	
			ID	
			9.2.2.79	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
Serving Grant Value	M		INTEGER (037,38)	(037) indicates E-DCH serving grant index as defined in [32]; Index 38 is not allowed

Range bound	Explanation		
maxnoofCommonMACFlows	Maximum number of Common MAC Flows		

# 9.2.2.105 Common E-DCH MAC-d Flow Specific Information

The *Common E-DCH MAC-d Flow Specific Information* IE is used for the establishment or modity Common E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows &gt;</maxno 		
>Common E-DCH MAC-d Flow ID	M		E-DCH MAC-d Flow ID 9.2.1.74	
>Maximum Number Of Retransmissions For E-DCH	М		9.2.2.13Dk	
>E-DCH HARQ Power Offset FDD	М		9.2.2.13Dk	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69	
>Common E-DCH Logical Channel information	M	1 <maxno oflogicalch annels&gt;</maxno 	New	
>>Logical Channel ID	M		9.2.1.80	
>>Maximum MAC-c PDU Size Extended	M		MAC PDU Size Extended 9.2.1.38C	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d Flows
maxnooflogicalchannels	Maximum number of logical channels

## 9.2.2.106 Maximum TB Sizes

The *Maximum TB Sizes* IE may be used by the sheduler in order to minimize the cell edge interference for cell edge users (and other users).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum TB Size cell edge users	M		INTEGER (05000,)	Unit: Bits
Maximum TB Size other users	M		INTEGER	Unit: Bits
			(05000,)	

# 9.2.2.107 Enhanced UE DRX Capability

Void.

# 9.2.2.108 Enhanced UE DRX Information

The *Enhanced UE DRX Information* IE provides information for configuring the UE in Cell\_FACH state to discontinuously receive HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T321	M		ENUMERATED (100, 200, 400, 800,)	Determines the time the UE waits until initiating DRX operation, in ms.
HS-DSCH DRX cycle <sub>FACH</sub>	M		ENUMERATED (4, 8, 16, 32,)	Determines the length of the DRX Cycle during DRX operation, in frames
HS-DSCH Rx burst <sub>FACH</sub>	M		ENUMERATED (2, 4, 8, 16,)	Determines the period within the DRX Cycle that the UE continuously receives HS- DSCH, in frames
DRX Interruption by HS- DSCH data	M		ENUMERATED (DrxInterruptionConfigured, DrxInterruptionNotConfigured)	

# 9.2.2.109 E-DPCCH Power Boosting Capability

This parameter defines the E-DPCCH Power Boosting Capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DPCCH Power Boosting Capability			ENUMERATED (E-DPCCH Power Boosting Capable, E-DPCCH Power Boosting Non-Capable)	

# 9.2.2.110 SixtyfourQAM DL and MIMO Combined Capability

This parameter defines the SixtyfourQAM downlink and MIMO combined capability for a Local Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL and MIMO Combined Capability			ENUMERATED (SixtyfourQAM DL and MIMO Combined Capable,	
			SixtyfourQAM DL and MIMO Combined Non- Capable)	

# 9.2.2.111 HS-DSCH Preconfiguration Info

The *HS-DSCH Preconfiguration Info* IE provides information of the target cell preconfiguration in the Node B as defined in [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sets of HS-SCCH Codes		1 <maxn oofHSDSC H&gt;</maxn 		Index 1 refers to the primary serving HS-DSCH cell Index 2 <maxnoofhsdsch> refer to secondary serving HS-DSCH cells in the order as listed in 9.2.2.112 HS-DSCH Preconfiguration Setup. Max index is 2 in this 3GPP release.</maxnoofhsdsch>
> HS-SCCH		1 <maxno< td=""><td></td><td></td></maxno<>		
Preconfigured Codes		ofHSSCC Hcodes>		
>> Code Number	M		INTEGER (0127)	
> SixtyfourQAM DL Usage Indicator	0		9.2.2.74B	
> HS-DSCH TB Size Table Indicator	0		9.2.2.18Ee	
HARQ Memory Partitioning	M		9.2.1.102	
E-DCH FDD DL Control Channel Information	0		9.2.2.13Dc	
HARQ Preamble Mode Activation Indicator	0		9.2.2.18b	
MIMO N/M Ratio	0		9.2.2.96	
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.69	

Range bound	Explanation
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxnoofHSDSCH	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.2.2.112 HS-DSCH Preconfiguration Setup

The *HS-DSCH Preconfiguration Setup* IE indicates that the Node B shall preconfigure set(s) of HS-SCCH codes and may contain a list of secondary serving HS-DSCH cells to be preconfigured for Enhanced Service Cell Change. The Cell Change procedure for Dual Cell operation is described in [49]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs/ehs reset scheme	M		ENUMERATED (Always, Inter NodeB Change)	MAC-hs/ehs reset handling at enhanced HS serving cell change: "Always" means always reset "Inter Node B Change" means Only reset at Inter NodeB cell change
HS-DSCH Physical Layer Category	М		9.2.1.31la	
MAC-hs Reordering Buffer Size for RLC-UM	M		9.2.1.38Ab	
Secondary Cells		0 <maxn oofHSDSC H-1&gt;</maxn 		Preconfigured secondary serving HS-DSCH cell. maxnoofHSDSCH-1 is max 1 in this 3GPP release.
> Secondary C-ID	M		9.2.1.9	C-ID of the preconfigured secondary serving HS-DSCH cell
> Num Secondary HS- SCCH Codes	0		INTEGER (1 maxnoofHSSCCHco des)	For the secondary serving HS- DSCH cell
>Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	For the secondary serving HS- DSCH cell
Num Primary HS-SCCH Codes	0		INTEGER (1 maxnoofHSSCCHco des)	For the primary serving HS- DSCH cell
HARQ Preamble Mode	0		9.2.2.18a	
MIMO Activation Indicator	0		9.2.2.71	
HS-DSCH MAC-d PDU Size Format	0		9.2.1.31ID	If not present, "Indexed MAC-d PDU Size" shall be assumed.
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.74A	For the primary serving HS- DSCH cell
UE without HS-SCCH constraint indicator	0		NULL	
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.68	

Range bound	Explanation
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxnoofHSDSCH	Maximum number of Secondary Serving HS-DSCH cells for one UE

# 9.2.2.113 Multi Cell Capability Info

This parameter defines the Multi Cell capability information for a Local Cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Multi Cell Capability	M		ENUMERATED	
			(Multi Cell Capable,	
			Multi Cell non	
			Capable)	
Possible Secondary Serving		0 <maxno< td=""><td>For secondary</td><td></td></maxno<>	For secondary	
Cell List		ofHSDSC	serving HS-DSCH	
		H-1>	cell. Max 1 in this	
			3GPP release.	
>Possible Secondary	M		Local Cell ID	
Serving Cell			9.2.1.38	

Range bound	Explanation
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

## 9.2.2.114 Minimum Reduced E-DPDCH Gain Factor

The minimum gain factor  $(\beta_{ed,k,reduced,min})$  defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Reduced E-DPDCH Gain Factor			ENUMERATED (8/15, 11/15, 15/15, 21/15, 30/15, 42/15, 60/15, 84/15,)	

### 9.2.2.115 IMB Parameters

The IMB Parameters IE contains specific parameters needed for 3.84Mcps MBSFN IMB operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sub-frame number	M		INTEGER (04,)	

# 9.2.3 TDD specific Parameters

#### 9.2.3.1 Block STTD Indicator

Void.

## 9.2.3.2 Burst Type

Void.

### 9.2.3.3 CCTrCH ID

The CCTrCH ID for dedicated and shared channels identifies unambiguously an uplink or downlink CCTrCH inside a Radio Link. For S-CCPCH, it identifies unambiguously a downlink CCTrCH within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER (015)	

### 9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD and 7.68Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see ref. [20]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER	
			(0127,)	

## 9.2.3.4A Constant Value

The Constant Value is the power margin used by a UE to set the proper uplink power for a DCH, USCH, or a RACH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Constant Value			INTEGER (-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&gt;</maxno 			_	
>Payload CRC Presence Indicator	М		9.2.1.49		_	
>UL FP Mode	М		9.2.1.66		_	
>ToAWS	М		9.2.1.61		-	
>ToAWE	М		9.2.1.60		-	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	М		9.2.1.20		_	
>>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the DCH is mapped	_	
>>CCTrCH ID	M		9.2.3.3	DL CCTrCH in which the DCH is mapped	_	
>>Transport Format Set	М		9.2.1.59	For UL	_	
>>Transport Format Set	М		9.2.1.59	For DL	-	
>>Allocation/Retention Priority	М		9.2.1.1A		_	
>>Frame Handling Priority	М		9.2.1.30		-	
>>QE-Selector	C- CoorDCH		9.2.1.50A		_	
>>Unidirectional DCH Indicator	0		9.2.1.68		YES	reject
>TNL QoS	0		9.2.1.58A		YES	ignore

Condition	Explanation
CoorDCH	The IE shall be present if this DCH is part of a set of coordinated
	DCHs (number of instances of the DCH Specific Info IE is greater
	than 1).

Range Bound	Explanation		
maxnoofDCHs	Maximum number of DCHs for one UE		

# 9.2.3.4D DCHs TDD To Modify

The DCHs TDD To Modify IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCHs TDD To Modify		1 <maxno ofDCHs&gt;</maxno 			_	
>UL FP Mode	0		9.2.1.66		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Transport Bearer Request Indicator	M		9.2.1.62A		_	
>DCH Specific Info		1 <maxno ofDCHs&gt;</maxno 			_	
>>DCH ID	M		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	Semantics Description
			Reference	
DL Timeslot Information		1 <maxno< td=""><td></td><td></td></maxno<>		
		ofDLts>		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst	M		9.2.3.7	
Туре				
>TFCI Presence	M		9.2.1.57	
>DL Code Information	M		TDD DL Code	
			Information	
			9.2.3.19B	

Range Bound	Explanation
maxnoofDLts	Maximum number of Downlink time slots per Radio Link

#### 9.2.3.4F DL Time Slot ISCP Info

The DL Time Slot ISCP Info IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Time Slot ISCP Info		1 <maxno ofDLts&gt;</maxno 		
>Time Slot	М		9.2.3.23	
>DL Timeslot ISCP	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			INTEGER (04095)	
Period				

## 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	M		INTEGER	
Value			(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 &gt;</ma 			-	
>Time Slot LCR	M		9.2.3.24A		1	
>Midamble Shift LCR	M		9.2.3.7A		ı	
>TFCI Presence	M		9.2.1.57		1	
>DL Code Information	M		TDD DL Code Information LCR 9.2.3.19C		-	
>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 &gt;</maxno 		
>Time Slot LCR	M		9.2.3.24A	
>DL Timeslot ISCP	M		9.2.3.4B	

Range Bound	Explanation
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps
	TDD.

# 9.2.3.4Q UpPCH Position LCR

The UpPCH Position LCR IE indicates the start point of the UpPCH channel, where the step size is 16chips, the maximum allowed value that can be utilised is 127\*16=2032chips, The reference point (UpPCH Position LCR =0) is the startpoint of the timeslot of UpPTS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UpPCH Position LCR			INTEGER (0127)	

### 9.2.3.5 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER (0239)	

### 9.2.3.5a DSCH ID

The DSCH ID uniquely identifies a DSCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH ID			INTEGER (0255)	

# 9.2.3.5b DSCH Information Response

The DSCH Information Response IE provides information for DSCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH Information Response		1 <maxno ofDSCHs&gt;</maxno 		
>DSCH ID	M		9.2.3.5a	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	

Range Bound	Explanation		
maxnoofDSCHs	Maximum number of DSCHs for one UE		

## 9.2.3.5A DSCH TDD Information

The DSCH TDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH TDD Information		1 <max noofDS CHs&gt;</max 			_	
>DSCH ID	M		9.2.3.5a		_	
>CCTrCH ID	М		9.2.3.3	DL CCTrCH in which the DSCH is mapped	_	
>Transport Format Set	М		9.2.1.59	For DSCH	_	
>Allocation/Retention Priority	M		9.2.1.1A		_	
>Frame Handling Priority	M		9.2.1.30		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	M		9.2.1.60		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore

Range Bound	Explanation			
MaxnoofDSCHs	Maximum number of DSCH for one UE			

## 9.2.3.5B DwPCH Power

DwPCH Power is the power that shall be used for transmitting the DwPCH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the DwPCH, the DwPCH power is the linear sum of the power that is used for transmitting the DwPCH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DwPCH Power			INTEGER	Unit: dBm
			(-150+400,)	Range: -15+40 dBm
				Step: 0.1 dB

## 9.2.3.5C Frame Adjustment Value

The Frame Adjustment Value IE represents the frame number correction within the initial synchronisation phase.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Adjustment Value			INTEGER (04095)	SFN <sub>new</sub> =(SFN <sub>old</sub> +Frame Adjustment Value) mod 4096

#### 9.2.3.5D IPDL TDD Parameter

The *IPDL TDD Parameter* IE provides information about IPDL to be applied for 3.84Mcps TDD or 7.68Mcps TDD when activated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP SpacingTDD	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	М		ENUMERATED ( Switch off 1 frame, Switch off 2 frames)	See [21]
Burst Mode parameters	0		9.2.1.5A	

### 9.2.3.5E Max FPACH Power

Max FPACH Power is the maximum power that shall be used for transmitting the FPACH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the FPACH, the Max FPACH Power is maximum of the linear sum of the power that is allowed for transmitting the FPACH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FPACH Power			INTEGER	Unit: dBm
			(-150+400,)	Range: -15+40 dBm
				Step: 0.1 dB

#### 9.2.3.5F HS-DSCH TDD Information

The *HS-DSCH TDD Information* IE is used for initial addition of HS-DSCH information to a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d	М		9.2.1.31IA		_	
Flows Information						
UE Capabilities Information		1			_	
>HS-DSCH Physical Layer Category	М		9.2.1.31la		_	
>1.28 Mcps TDD Uplink Physical Channel Capability	0		9.2.3.5Gc	Applicable to 1.28Mcps TDD only	YES	ignore
>Number of Supported Carriers	0		ENUMERATE D ( One-one carrier, One- three carrier, Three-three carrier, One- six carrier, Three-six carrier, Six-six carrier,)	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier that UE can support at the same time, where 'One-three carrier' means the number of supported carrier is one for the uplink,and three for the downlink.	YES	reject
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.38Ab		_	
TDD ACK NACK Power Offset	М		9.2.3.18F		_	
HS-SICH SIR Target	0		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	ignore
HS-SICH TPC step size	0		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	ignore
HS-DSCH MAC-d PDU Size Format	0		9.2.1.31ID	If not present, "Indexed MAC-d PDU Size" shall be used.	YES	reject
TSN-Length	0		9.2.3.51	Applicable for 1.28Mcps TDD when using multiple frequencies	YES	reject

# 9.2.3.5G HS-DSCH TDD Information Response

The HS-DSCH TDD Information Response provides information for HS-DSCH MAC-d flows that have been established or modified. It also provides additional HS-DSCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d		0 <max< td=""><td></td><td></td><td>_</td><td></td></max<>			_	
Flow Specific		noofMA				
Information		CdFlow				
Response		S>				
>HS-DSCH MAC-d	М		9.2.1.311		_	
Flow ID >Binding ID	0		9.2.1.4		_	
>Transport Layer	0		9.2.1.63			
Address			0.2.1.00			
>HS-DSCH Initial	0		9.2.1.31Ha		_	
Capacity Allocation						
HS-SCCH Specific		0 <max< td=""><td></td><td>Not applicable to 1.28</td><td>GLOBAL</td><td>reject</td></max<>		Not applicable to 1.28	GLOBAL	reject
Information		NoOfHS		Mcps TDD or		
Response		SCCHc		7.68Mcps TDD		
>Time Slot	M	odes>	9.2.3.23			
>Midamble Shift And	M		9.2.3.23			
Burst Type	IVI		9.2.3.7		_	
>TDD Channelisation	М		9.2.3.19		_	
Code	]					
>HS-SICH		1			_	
Information						
>>HS SICH ID	M		9.2.3.5Gb		_	
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift	М		9.2.3.7		_	
And Burst Type >>TDD	M		9.2.3.19			
>>1DD Channelisation	IVI		9.2.3.19		_	
Code						
HS-SCCH Specific		0 <max< td=""><td></td><td>Not applicable to 3.84</td><td>_</td><td></td></max<>		Not applicable to 3.84	_	
Information .		HSDPA		Mcps TDD or		
Response LCR per		Frequen		7.68Mcps TDD		
UARFCN		cy>		See note1 below		
>HS-SCCH Specific		1 <max< td=""><td></td><td>Not applicable to 3.84</td><td>GLOBAL</td><td>reject</td></max<>		Not applicable to 3.84	GLOBAL	reject
Information		NoOfHS SCCHc		Mcps TDD or 7.68Mcps TDD		
Response LCR		odes>		7.6600Cps TUD		
>>Time Slot LCR	М	00002	9.2.3.24A		_	
>>Midamble Shift	M		9.2.3.7A		_	
LCR						
>>First TDD	M		TDD		_	
Channelisation			Channelisatio			
Code			n Code			
0	N 4		9.2.3.19			
>>Second TDD Channelisation	M		TDD Channelisatio		_	
Code	1		n Code			
	1		9.2.3.19			
>>HS-SICH		1	-		_	
Information LCR						
>>>HS SICH ID	M		9.2.3.5Gb	If the Extended HS-	_	
				SICH ID IE is included		
				in the <i>HS-SICH</i> Information LCR IE,		
	1			the HS-SICH ID IE		
				shall be ignored.		
>>>Time Slot LCR	M		9.2.3.24A	<u> </u>	_	
>>>Midamble Shift LCR	М		9.2.3.7A		-	
>>>TDD	M		9.2.3.19		_	
Channelisation Code						
>>>Extended HS-	0		9.2.3.5K	The Extended HS-	YES	ignore
SICH ID				SICH ID IE shall be		
	1	ĺ	1	used if the HS-SICH		Ĩ

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				identity has a value larger than 31.		
>>UsedFrequency	0		UARFCN 9.2.1.65	Applicable for 1.28Mcps TDD when using multiple frequencies. this IE indicates the frequency which is actually used by the HS-SCCH.	YES	reject
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies. See note2 below	YES	ignore
HARQ Memory Partitioning per UARFCN		0 <max HSDPA Frequen</max 		See note 1 below	_	
>HARQ Memory Partitioning	0	cy>	9.2.1.102		_	
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies. See note2 below	YES	ignore
HS-SCCH Specific Information Response 7.68Mcps		0 <max NoOfHS SCCHc odes&gt;</max 		Not applicable to 3.84 Mcps TDD or 1.28Mcps TDD	GLOBAL	reject
>Time Slot	М	04002	9.2.3.23		_	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35		_	
>Channelisation Code 7.68Mcps	M		TDD Channelisatio n Code 7.68Mcps 9.2.3.34		-	
>HS-SICH Information 7.68Mcps		1			-	
>>HS SICH ID	M		9.2.3.5Gb			
>>Time Slot	M		9.2.3.23		_	
>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.35		_	
>>Channelisation Code 7.68Mcps	M		TDD Channelisatio n Code 7.68Mcps 9.2.3.34		_	
Multi-Carrier number	0		INTEGER(1 maxHSDPAFr equency)	Applicable for 1.28Mcps TDD when using multiple frequencies.	YES	ignore

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxHSDPAFrequency	Maximum number of Frequencies that UE can support

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxHSDPAFrequency are represented by separate ASN.1 structures with different criticalities.

Note 2: The *UARFCN* IE in the *HARQ Memory Partitioning per UARFCN* IE has the same content as that in the *HS-SCCH Specific Information Response LCR per UARFCN* IE. They will be represented by one ASN.1 structure with same criticalities

### 9.2.3.5GA HS-DSCH TDD Update Information

The *HS-DSCH TDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change Indicator	0		9.2.1.31K	
TDD ACK NACK Power Offset	0		9.2.3.18F	

#### 9.2.3.5Ga HS-SCCH ID

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SCCH ID			INTEGER (031)	

#### 9.2.3.5Gb HS-SICH ID

The HS-SICH ID identifies unambiguously a HS-SICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SICH ID			INTEGER (031)	

## 9.2.3.5Gc 1.28 Mcps TDD Uplink Physical Channel Capability

The 1.28 Mcps TDD Uplink Physical Channel Capability IE defines the UE uplink radio access capacity, see ref [33].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of	М		INTEGER	
Maximum Number of	IVI		INTEGER	
timeslots per subframe			(16)	
Maximum number of physical	M		ENUMERATED	
channels per timeslot			(one, two,, three,	
			four)	

### 9.2.3.5H IPDL TDD Parameters LCR

The IPDL TDD Parameters LCR IE provides information about IPDL to be applied for 1.28Mcps TDD when activated.

IE/Group Name   Presence   Range   IE Type and   Semantics Description
--

		Reference	
IP SpacingTDD	M	ENUMERATED	See [21]
		(30, 40, 50, 70, 100,	
		)	
IP Start	M	INTEGER (04095)	See [21]
IP_Sub	M	ENUMERATED (	See [21]
		First,	
		Second,	
		Both)	
Burst Mode Parameters	0	9.2.1.5A	

# 9.2.3.5I TSN-Length

Indicates the TSN bits applied to the MAC-hs PDU frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSN-Length			ENUMERATED (tsn- 6bits, tsn-9bits)	

## 9.2.3.5J Extended HS-SCCH ID

The Extended HS-SCCH ID LCR identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs in a cell for 1.28Mcps TDD.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
Extended HS-SCCH ID			INTEGER(32255)	The Extended HS-SCCH ID IE shall be used if the HS-SCCH identity has a value larger than 31.

#### 9.2.3.5K Extended HS-SICH ID

The Extended HS-SICH ID LCR identifies unambiguously a HS-SICH in a cell for 1.28Mcps TDD

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
Extended HS-SICH ID			INTEGER(32255)	The Extended HS-SICH ID IE shall be used if the HS-SICH identity has a value larger than 31.

### 9.2.3.6 Max PRACH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max PRACH Midamble Shift			ENUMERATED	
			(4, 8,,16)	

## 9.2.3.7 Midamble Shift And Burst Type

This information element indicates burst type and midamble allocation for burst types 1, 2 and 3.

The 256 chip midamble supports 3 different time shifts, the 512 chips midamble may support 8 or even 16 time shifts.

Three different midamble allocation schemes exist:

Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М		(1, 5, 15)	
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	
>Type2			, , ,	
>>Midamble Configuration Burst Type 2	М		ENUMERATED (3, 6)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (05)	
>Type3			` '	UL only
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	М		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	Semantics Description
			Reference	
Midamble Allocation Mode	M		ENUMERATED (	
			Default midamble,	
			Common midamble,	
			UE specific	
			midamble,	
			)	
Midamble Shift Long	C-UE		INTEGER (015)	
Midamble Configuration LCR	M		ENUMERATED (2,	As defined in [19]
			4, 6, 8, 10, 12, 14,	
			16,)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation Mode IE is set to
	"UE-specific midamble".

## 9.2.3.7Aa Notification Indicator Length

The Notification Indicator Length indicates the number of symbols for Notification Indication transmitted in one timeslot (see ref [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Notification Indicator Length			ENUMERATED (2, 4, 8,)	

# 9.2.3.7B Number Of Cycles Per SFN Period

The *Number Of Cycles Per SFN Period* IE indicates the number of repetitions per SFN period where the same schedule shall apply.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Cycles Per SFN			ENUMERATED	
Period			(1, 2, 4, 8,,	
			16, 32, 64)	!

## 9.2.3.7C Number Of Repetitions Per Cycle Period

The *Number Of Repetitions Per Cycle Period* IE indicates the number of Sync frames per Cycle Length where the [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD - Sync\_DL Codes] shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Repetitions Per			INTEGER (210)	
Cycle Period				

# 9.2.3.7D Number Of Subcycles Per Cycle Period

The *Number Of Subcycles Per Cycle Period* IE indicates the number of subcycles within a Synchronisation Cycle. Within each subcycle, the same sequence of SYNC\_DL Code transmissions and receptions is performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number Of Subcycles Per Cycle Period			INTEGER (116,)	

# 9.2.3.8 Paging Indicator Length

The Paging Indicator Length indicates the number of symbols for Page Indication transmitted in one timeslot (see ref [19]).

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 (-150+400,)	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].

[1.28Mcps TDD - When applied to configure the E-DCH Non-scheduled Grant Information, the Repetition Length represents the number of consecutive Subframes, i.e. 5ms inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Length			INTEGER (163)	

## 9.2.3.16 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the Radio Frame J, it is assigned to the same physical channel also in all the Radio Frames J+n\*Repetition Period (where n is an integer) see ref. [18].

[1.28Mcps TDD- When applied to configure the E-DCH Non-scheduled Grant Information, the Repetition Period represents the number of consecutive Subframes, i.e. 5ms after which the same assignment scheme of Time Slots to a Physical Channel is repeated see ref. [18].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period			ENUMERATED	
			(1, 2, 4, 8, 16, 32,	
			64,)	

#### 9.2.3.17 SCH Time Slot

The *SCH Time Slot* IE represents the first time slot (k) of a pair of time slots inside a Radio Frame that shall be assigned to the Physical Channel SCH. The *SCH Time Slot* IE is only applicable if the value of *Sync Case* IE is Case 2 since in this case the SCH is allocated in TS#k and TS#k+8.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCH Time Slot			INTEGER (06)	

### 9.2.3.18 Sync Case

The SCH and PCCPCH are mapped on one or two downlink slots per frame. There are two cases of SCH and PCCPCH allocation as follows:

Case 1) SCH and PCCPCH allocated in a single TS#k

Case 2) SCH allocated in two TS: TS#k and TS#k+8 PCCPCH allocated in TS#k

[1.28Mcps TDD - There is no Sync Case indication needed for 1.28Mcps TDD. If the *Sync Case* IE must be included in a message from CRNC to Node B used for 1.28Mcps TDD, the CRNC should indicate Sync Case 1 and the Node B shall ignore it.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			INTEGER (12,)	

## 9.2.3.18A Special Burst Scheduling

The number of frames between special burst transmissions during DTX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Special Burst Scheduling			INTEGER (1256)	Number of frames between special burst transmission during DTX

### 9.2.3.18B SYNC\_DL Code ID

The SYNC\_DL Code ID identifies the SYNC\_DL Code which used by DwPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SYNC_DL Code ID			INTEGER (132,)	

## 9.2.3.18C Sync Frame Number

The *Sync Frame Number* IE indicates the number of the Sync frame within a Synchronisation Cycle or Subcycle, respectively, where the cell synchronisation bursts shall be transmitted or the cell synchronisation bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Frame Number			INTEGER (110)	

### 9.2.3.18D Synchronisation Report Characteristics

The *Synchronisation Report Characteristics* IE defines how the reporting on measured [3.84Mcps TDD - cell synchronisation bursts] [1.28Mcps TDD - Sync\_DL Codes] shall be performed

Different methods shall apply for the measured [3.84Mcps TDD - cell synchronisation burst] [1.28Mcps TDD - Sync\_DL Codes] reports. [3.84Mcps TDD - In the frequency acquisition phase the measurement report shall be sent when the frequency locking is completed.] In the initial phase and for the measurement on late-entrant cells an immediate report after the measured frame is expected.

In the steady-state phase measurement reports may be given after every measured frame, after every SFN period, after every cycle length or only when the requested threshold is exceeded.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Synchronisation Report Characteristics Type	M		ENUMERATED ( Frame related, SFN period related, Cycle length related, Threshold exceeding, Frequency Acquisition completed,)	Bescription	-	Onticumy
Threshold Exceeding	C- Threshol dExceedi ng			Applies only to the Steady State Phase	-	
>Cell Sync Burst Threshold Information		0 <maxn oofCellSy ncBursts &gt;</maxn 		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	-	

	M	I	Cuna Frama Nurshar	1	T	
>>Sync Frame	IVI		Sync Frame Number 9.2.3.18C		_	
Number To Receive			9.2.3.100			
>>Cell Sync Burst Information		1 <maxn oofrecept ionsperS yncFram e&gt;</maxn 			_	
>>>Cell Sync Burst Code	М		9.2.3.4G		_	
>>>Cell Sync Burst Code Shift	М		9.2.3.4H		_	
>>>Cell Sync Burst Arrival Time	0		Cell Sync Burst Timing 9.2.3.4L		_	
>>>Cell Sync Burst Timing Threshold	0		9.2.3.4M		_	
>SYNC_DL Code Threshold Information LCR		0 <maxn oofSyncF ramesLC R&gt;</maxn 		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	GLOBAL	ignore
>>Sync Frame Number To Receive	M		Sync Frame Number 9.2.3.18C		_	
>>SYNC_DL Code Information LCR		1 <maxn oofrecept ionsperS yncFram eLCR&gt;</maxn 			_	
>>>SYNC_DL Code 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. 8PSK denotes 16QAM for S-CCPCH

### 9.2.3.19A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The *Offset Type* IE = "No Initial Offset" is used when a starting offset is not required and the TDD Physical channel offset for each DPCH in the CCTrCH shall be directly determined from the TDD DPCH Offset. The *Offset Type* IE = "Initial Offset" is used when a starting offset is required. The TDD DPCH Offset shall map to the CFN and the TDD Physical Channel Offet for each DPCH in this CCTrCH shall calculated by TDD DPCH Offset *mod* Repetition period, see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type				
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (0255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (063)	

### 9.2.3.19B TDD DL Code Information

The TDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information		1 <maxno ofDPCHs&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code	М		9.2.3.19	

Range Bound	Explanation
maxnoofDPCHs	Maximum number of DPCHs in one CCTrCH

## 9.2.3.19C TDD DL Code Information LCR

The TDD DL Code Information LCR IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information LCR		1 <maxno ofDPCHsL CR&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	М		9.2.3.19a	
>TDD DL DPCH Time Slot Format LCR	М		9.2.3.19D	

Range Bound	Explanation		
maxnoofDPCHsLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD		

## 9.2.3.19D TDD DL DPCH Time Slot Format LCR

TDD DL DPCH Time Slot Format LCR indicates the time slot formats used in DL DPCH for 1.28Mcps TDD (see ref. [19]). It also applies to PDSCH.

IE/Group Name	Presence	Range	IE Type and 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	М		INTEGER (024,)	For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE denotes MBSFN S-CCPCH time slot format, INTEGER (011,).

# 9.2.3.20 TDD Physical Channel Offset

The Offset represents the phase information for the allocation of a physical channel. (SFN mod Repetition Period = Offset) see ref. [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel Offset			INTEGER (063)	

# 9.2.3.21 TDD TPC DL Step Size

This parameter indicates step size for the DL power adjustment (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERATED (1, 2, 3,)	Unit: dB

# 9.2.3.21a TDD TPC UL Step Size

This parameter indicates step size for the UL power adjustment (see ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Uplink Step Size			ENUMERATED (1, 2, 3,)	Unit: dB

## 9.2.3.21A TDD UL Code Information

The TDD UL Code Information IE provides information for UL Code to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information		1 <maxno ofDPCHs&gt;</maxno 		
>DPCH ID	М		9.2.3.5	
>TDD Channelisation Code	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&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code LCR	М		9.2.3.19a	
>TDD UL DPCH Time Slot Format LCR	М		9.2.3.21C	

Range Bound	Explanation	
maxnoofDPCHsLCR	Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD	

## 9.2.3.21C TDD UL DPCH Time Slot Format LCR

TDD UL DPCH Time Slot Format LCR indicates the time slot formats used in UL DPCH for 1.28Mcps TDD (see ref. [19]). It also applies to PUSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Modulation	M			
>QPSK				
>>QPSK TDD UL DPCH Time Slot Format LCR	M		INTEGER (069,)	
>8PSK				
>>8PSK TDD UL DPCH Time Slot Format LCR	M		INTEGER (024,)	

## 9.2.3.22 TFCI Coding

The TFCI Coding describes the way how the TFCI bits are coded. By default 1 TFCI bit is coded with 4 bits, 2 TFCI bits are coded with 8 bits, 3-5 TFCI bits are coded with 16 bits and 6-10 TFCI bits are coded with 32 bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Coding			ENUMERATED	
			(4, 8, 16, 32,)	

## 9.2.3.22a Timing Adjustment Value

The *Timing Adjustment Value* IE indicates the timing correction within a Frame for 3.84Mcps TDD. Type 1 is used for the initial phase of Node B synchronisation. Type 2 is used for the steady-state phase of Node B synchronisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Phase				According to mapping in [23]
>Initial Phase				
>>Timing Adjustment Value	M		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)	

### 9.2.3.24B Time Slot LCR Extension

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot LCR Extension			ENUMERATED (ts7,)	ts7 indicates the MBSFN Special Timeslot for 1.28Mcps TDD MBSFN Dedicated Carrier.

### 9.2.3.25 Time Slot Status

This parameter indicates whether the TS in the cell is active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot Status			ENUMERATED (	
			Active,	
			Not Active,	
			)	

# 9.2.3.26 Transmission Diversity Applied

Defines if Transmission Diversity on physical channels that may use closed loop transmit diversity is to be applied in a cell (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Diversity Applied			BOOLEAN	True: Transmission Diversity shall be applied in this Cell. False: Transmission Diversity shall not be applied in this Cell.

### 9.2.3.26A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the Node B, see ref. [5].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER (0127)	According to mapping in [23].

# 9.2.3.26B UL PhysCH SF Variation

Indicates whether variation of SF in UL is supported by Radio Link or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL PhysCH SF Variation			ENUMERATED ( SF_Variation_supported, SF_Variation_NOT_ supported)	

#### 9.2.3.26C UL Timeslot Information

The UL Timeslot Information IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot Information		1 <maxno ofULts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type	М		9.2.3.7	
>TFCI Presence	М		9.2.1.57	
>UL Code Information	М		TDD UL Code Information 9.2.3.21A	

Range Bound	Explanation
maxnoofULts	Maximum number of Uplink time slots per Radio Link

## 9.2.3.26D UL Time Slot ISCP Info

The UL Time Slot ISCP Info IE provides information for UL Interfernce level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Time Slot ISCP Info		1 <maxno ofULts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
maxnoofULts	Maximum number of Uplink time slots per Radio Link

## 9.2.3.26E UL Timeslot Information LCR

The UL Timeslot Information IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Timeslot Information LCR		1 <maxno ofULtsLCR &gt;</maxno 			_	
>Time Slot LCR	М		9.2.3.24A		_	
>Midamble Shift LCR	М		9.2.3.7A		_	
>TFCI Presence	М		9.2.1.57		_	
>UL Code Information	М		TDD UL Code Information LCR 9.2.3.21B		-	
>PLCCH Information	0		9.2.3.31		YES	reject

Range Bound	Explanation
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

## 9.2.3.26F UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interfernce level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Time Slot ISCP Info LCR		1 <maxno ofULtsLCR &gt;</maxno 		
>Time Slot LCR	M		9.2.3.24A	
>UL Timeslot ISCP	M		9.2.3.26A	

Range Bound	Explanation
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	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 Frequency			INTEGER (18)	Unit: subframe Step: 1

# 9.2.3.26H Uplink Synchronisation Step Size

The *UL Synchronisation Step Size* IE specifies the step size to be used for the adjustment of the uplink transmission timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Synchronisation Step Size			INTEGER (18)	Unit: 1/8 chip Step: 1.

### 9.2.3.27 USCH ID

The USCH ID uniquely identifies a USCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH ID			INTEGER (0255)	

## 9.2.3.28 USCH Information

The USCH Information IE provides information for USCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
USCH Information		1 <max noofUS CHs&gt;</max 			_	
>USCH ID	M		9.2.3.27		_	
>CCTrCH ID	М		9.2.3.3	UL CCTrCH in which the USCH is mapped	_	
>Transport Format Set	М		9.2.1.59	For USCH	_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.58A		YES	ignore

Range Bound	Explanation		
maxnoofUSCHs	Maximum number of USCHs for one UE		

# 9.2.3.29 USCH Information Response

The USCH Information Response IE provides information for USCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH Information Response		1 <maxno ofUSCHs&gt;</maxno 		
>USCH ID	М		9.2.3.27	
>Binding ID	0		9.2.1.4	
>Transport Laver Address	0		9.2.1.63	

Range Bound	Explanation
maxnoofUSCHs	Maximum number of USCHs for one UE

### 9.2.3.30 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to beacon channels (see ref. [19]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCTD Indicator			ENUMERATED (	
			active,	
			inactive)	

### 9.2.3.31 PLCCH Information

The PLCCH Information IE carries a PLCCH assignment for a timeslot of an UL DCH-type CCTrCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID	M		9.2.1.13	
PLCCH Sequence Number	М		9.2.3.32	

### 9.2.3.32 PLCCH Sequence Number

This sequence number represents a portion of a PLCCH used to signal TPC / SS bits to a single UE. A value of zero indicates that the PLCCH assignment has been deleted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLCCH Sequence Number			INTEGER (014)	

## 9.2.3.33 Common Physical Channel ID 7.68Mcps

Common Physical Channel ID is the unique identifier for one common physical channel within a cell for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID 7.68 Mcps			INTEGER (0511)	

## 9.2.3.34 TDD Channelisation Code 7.68Mcps

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 7.68Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code that can have a spreading factor of 1, 2, 4, 8, 16 or 32.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
TDD Channelisation Code			ENUMERATED((1/1	
			), (2/1), (2/2), (4/1),	
			(4/4), (8/1), (8/8),	
			(16/1), (16/16),	
			(32/1), (32,32),)	

# 9.2.3.35 Midamble Shift And Burst Type 7.68Mcps

This information element indicates burst type and midamble allocation for burst types 1,2 and 3 for 7.68Mcps TDD.

Three different midamble allocation schemes exist:

Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type1				
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	M		INTEGER (015)	
>Type2				
>>Midamble Configuration Burst Type 2	М		ENUMERATED (4, 8)	As defined in [19]
>>CHOICE Midamble Allocation Mode	M			
>>>Default Midamble			NULL	
>>>Common Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Short	M		INTEGER (07)	
>Type3				UL only
>>Midamble Configuration Burst Type 1 And 3	М		ENUMERATED (4, 8, 16)	As defined in [19]
>>CHOICE Midamble Allocation Mode	М			
>>>Default Midamble			NULL	
>>>UE Specific Midamble				
>>Midamble Shift Long	М		INTEGER (015)	

# 9.2.3.36 Common Physical Channel Status Information 7.68Mcps

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Physical Channel ID 7.68 Mcps	M		9.2.3.33	
Resource Operational State	M		9.2.1.52	
Availability Status	M		9.2.1.2	

# 9.2.3.37 Neighbouring TDD Cell Measurement Information 7.68Mcps

This IE provides information on the 7.68 Mcps TDD neighbouring cells used for the purpose of measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time Slot* IE and *Midamble Shift And Burst Type 7.68Mcps* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time Slot	0		9.2.3.23	
Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.35	

## 9.2.3.38 UL Timeslot Information 7.68Mcps TDD

The *UL Timeslot Information* IE provides information on the time slot allocation for an UL DPCH for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot Information		1 <maxno ofULts&gt;</maxno 		
>Time Slot	М		9.2.3.23	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35	
>TFCI Presence	М		9.2.1.57	
>UL Code Information	M		TDD UL Code Information 7.68Mcps TDD 9.2.3.40	

Range Bound	Explanation
maxnoofULts	Maximum number of Uplink time slots per Radio Link

# 9.2.3.39 DL Timeslot Information 7.68Mcps TDD

The DL Timeslot Information IE provides information for DL Time slot to be established for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot Information		1 <maxno ofDLts&gt;</maxno 		
>Time Slot	M		9.2.3.23	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.35	
>TFCI Presence	M		9.2.1.57	
>DL Code Information	M		TDD DL Code Information 7.68Mcps TDD 9.2.3.41	

Range Bound	Explanation
maxnoofDLts	Maximum number of Downlink time slots per Radio Link

## 9.2.3.40 TDD UL Code Information 7.68Mcps TDD

The *TDD UL Code Information 7.68Mcps TDD* IE provides information for UL Code to be established for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD UL Code Information		1 <maxno ofDPCHs&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.34	

Range Bound	Explanation
maxnoofDPCHs	Maximum number of uplink DPCHs in one CCTrCH at 7.68Mcps

# 9.2.3.41 TDD DL Code Information 7.68Mcps TDD

The TDD Code Information 7.68Mcps TDD IE provides DL Code information for the RL for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD DL Code Information		1 <maxno ofDPCHs7 68&gt;</maxno 		
>DPCH ID	M		9.2.3.5	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.34	

Range Bound	Explanation
maxnoofDPCHs768	Maximum number of downlink DPCHs in one CCTrCH at 7.68Mcps

## 9.2.3.42 DPCH ID 7.68Mcps

The DPCH ID 7.68Mcps identifies unambiguously a DPCH inside a downlink Radio Link for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER (0479)	

# 9.2.3.43 PDSCH ID 7.68Mcps

The PDSCH ID 7.68Mcps identifies unambiguously a PDSCH inside a cell for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PDSCH ID			INTEGER (0511)	

### 9.2.3.44 Max E-RUCCH Midamble Shift

Indicates the maximum number of Midamble shifts to be used in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max E-RUCCH Midamble Shift			ENUMERATED (4, 8,,16)	
			( <del>4</del> , 0,,10)	

## 9.2.3.45 E-PUCH Information

The *E-PUCH Information* IE provides parameters to configure the E-PUCH physical channel for 3.84Mcps TDD and 7.68 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum code rate	M		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
Maximum code rate	M		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
HARQ Info for E-DCH	M		ENUMERATED (rv0, rvtable)	'rv0' indicates that the UE will only use E_DCH RV index 0. 'rvtable' indicates that the UE will use an RSN based RV index as specified in [8]
N <sub>E-UCCH</sub>	М		INTEGER (112)	Number of slots that are required to carry TPC and TFCI (consecutively allocated slots beginning with the first).

# 9.2.3.45a E-PUCH Information LCR

The *E-PUCH Information LCR* IE provides parameters to configure the E-PUCH physical channel for 1.28Mcps TDD.

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IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Minimum code rate	M		INTEGER	Unit: -	_	
IVIIIIIIIIIIII COde Tate	IVI		(063)	Range: 0.055	_	
			(000)	1		
				Step: 0.015		
Maximum code rate	M		INTEGER	Unit: -	_	
			(063)	Range: 0.055		
				1		
				Step: 0.015		
HARQ Info for E-DCH	M		ENUMERA	'rv0' indicates	_	
			TED (rv0,	that the UE will		
			rvtable)	only use		
				E_DCH RV index 0.		
				'rvtable'		
				indicates that		
				the UE will use		
				an RSN based		
				RV index as		
				specified in [8]		
PRXdes_base	M		INTEGER	dBm.	_	
			(-11250)	Reference		
				Desired RX		
				power level for		
				E-PUCH.		
				Reference to Pe-base in [21]		
E-PUCH TPC Step Size	M		TDD TPC	1 6-5036 111 [21]	_	
			UL Step			
			Size			
			9.2.3.21a			
E-AGCH TPC Step Size	M		TDD TPC		_	
			DL Step			
			Size			
E DUOL Davia Cartral OAD			9.2.3.21	Linite Nicords on of	VE0.	
E-PUCH Power Control GAP	0		INTEGER	Unit: Number of	YES	ignore
			(1255)	subframes. Reference to E-		
				PUCH Power		
				Control for		
				1.28Mcps TDD		
				in [21]. If it is		
				not present, UE		
				shall deem it to		
				be infinite in		
				which case		
				closed loop		
				power control		
				shall always be		
	1			used.	1	

# 9.2.3.46 E-TFCS Information TDD

Whereas the related E-DCH Transport Block sizes are standardised in [32] this IE gives details on the Reference Betas.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Beta Information QPSK		1 <maxno ofRefbeta s&gt;</maxno 		
>Reference Code Rate	М		INTEGER (010)	Unit: - Range: 01 Step: 0.1
>Reference Beta	М		INTEGER(-1516)	Unit: - Range: -15+16 Step: 1 dB
Reference Beta Information 16QAM		1 <maxno ofRefbeta s&gt;</maxno 		
>Reference Code Rate	М		INTEGER (010)	Unit: - Range: 01 Step: 0.1
>Reference Beta	М		INTEGER(-1516)	Unit: - Range: -15+16 Step: 1 dB

Range Bound	Explanation
maxnoofRefbetas	Maximum number of signalled reference betas

## 9.2.3.47 E-DCH MAC-d Flows Information TDD

The E-DCH MAC-d Flows Information TDD IE is used for the establishment of E-DCH MAC-d flows for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows</maxno 		
>E-DCH MAC-d Flow ID	М		9.2.1.74	
>Allocation/Retention Priority	М		9.2.1.1A	
>TNL QoS	0		9.2.1.58A	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>Payload CRC Presence Indicator	М		9.2.1.49	
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.81	
>E-DCH HARQ Power Offset TDD	М		9.2.3.61	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69	
>E-DCH Grant TypeTDD	М	_	9.2.3.53	
>E-DCH Logical Channel Information	М		9.2.1.71	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.61a	Mandatory for LCR TDD. Not applicable for 3.84Mcps TDD and 7.68Mcps TDD.

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

# 9.2.3.48 E-DCH Non-scheduled Grant Information TDD

The E-DCH Non-scheduled Grant Information TDD IE is used to specify the details of a non-scheduled grant for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	M		9.2.3.54	
Power Resource Related Information	M		9.2.3.55	
Repetition Period	M		9.2.3.16	
Repetition Length	M		9.2.3.15	
TDD E-PUCH Offset	M		9.2.3.56	
TDD Channelisation Code	M		9.2.3.19	

# 9.2.3.48a E-DCH Non-scheduled Grant Information LCR TDD

Only for 1.28Mcps TDD. The *E-DCH Non-scheduled Grant Information LCR TDD* IE is used to specify the details of a non-scheduled grant for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
Timeslot Resource Related	M		Reference			
Information LCR	IVI		9.2.3.54a		_	
Power Resource Related	M		9.2.3.55		_	
Information			0.2.0.00			
Repetition Period	M		9.2.3.16		_	
Repetition Length	M		9.2.3.15		_	
Subframe Number	M		ENUMERA TED ( 0,1)	Used to indicate from which subframe of the Radio Frame indicated by TDD E-PUCH Offset IE the physical resources are assigned to the E-DCH Nonscheduled	_	
				Grant.		
TDD E-PUCH Offset	M		9.2.3.56		_	
TDD Channelisation Code	M		9.2.3.19		_	
N <sub>E-UCCH</sub>	М		INTEGER (18)	Number of E- UCCH and TPC instances within an E-DCH TTI. Details are described in [19].	_	
E-HICH Information		1				
>E-HICH ID TDD	М		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information IE, the E-HICH ID TDD IE shall be ignored.	_	
>Signature Sequence Group Index	М		INTEGER (019)		_	
>Extended E-HICH ID TDD	0		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore

# 9.2.3.49 E-DCH TDD Information

The *E-DCH TDD Information* specifies the details of the maximum bit rate and processing overload level.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate	0		9.2.3.57	
E-DCH Processing Overload Level	0		9.2.1.79	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85	

### 9.2.3.49a E-DCH TDD Information LCR

Only for 1.28Mcps TDD. The *E-DCH TDD Information LCR* IE specifies the details of the UE physical layer category, Node B processing overload level and power offset, Maximum Number of Retransmission and E-DCH Retransmission timer for scheduling info.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Physical Layer Category LCR	0		9.2.3.67	If the Extended E-DCH Physical Layer Category LCR IE is included in the E-DCH TDD Information LCR IE, the E-DCH Physical Layer Category LCR IE shall be ignored.	-	
E-DCH Processing Overload Level	0		9.2.1.79	onan so ignoroa.	-	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85		-	
Extended E-DCH Physical Layer Category LCR	0		9.2.3.67A	The Extended E-DCH Physical Layer Category LCR IE shall be used if the E-DCH Physical Layer Category has a value larger than 5.	YES	reject
Maximum Number of Retransmission for Scheduling Info LCR	0		Maximum Number of Retransmissi ons for E- DCH 9.2.1.81		YES	ignore
E-DCH Retransmission timer for Scheduling Info LCR	0		E-DCH MAC- d Flow Retransmissi on Timer 9.2.3.61a		YES	ignore

# 9.2.3.50 E-DCH TDD Information Response

The *E-DCH TDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH TDD MAC-d Flow Specific Information Response		0 <maxno ofEDCHM ACdFlows &gt;</maxno 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		_	
E-AGCH Specific Information Response TDD		0 <maxno OfEAGCH codes&gt;</maxno 			-	
>E-AGCH ID TDD	M		9.2.3.51		_	
E-RNTI	M		9.2.1.75		_	
Scheduled E-HICH Specific Information Response 1.28Mcps TDD		0 <maxno OfEHICHc odes&gt;</maxno 		1.28Mcps TDD only	_	
>EI	М		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.	_	
>E-HICH ID TDD	М		9.2.3.51a	If the Extended E-HICH ID TDD IE is included in the E-HICH Information IE, the E-HICH ID TDD IE shall be ignored	-	
>Extended E-HICH ID TDD	0		9.2.3.51b	Applicable to 1.28Mcps TDD only, the Extended E- HICH ID TDD IE shall be used if the E-HICH identity has a value larger than 31.	YES	ignore

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows
maxnoofEAGCHcodes	Maximum number of E-AGCHs assigned to one UE
maxNoOfEHICHcodes	Maximum number of E-HICHs assigned to one UE

# 9.2.3.51 E-AGCH ID TDD

The *E-AGCH ID* identifies unambiguously an E-AGCH inside a cell for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH ID			INTEGER (031,,32255)	

# 9.2.3.51a E-HICH ID TDD

The *E-HICH ID TDD* IE identifies unambiguously an E-HICH inside a cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH ID TDD			INTEGER (031)	

### 9.2.3.51b Extended E-HICH ID TDD

The Extended E-HICH ID TDD IE identifies unambiguously an E-HICH inside a cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended E-HICH ID TDD			INTEGER (32255)	

# 9.2.3.52 E-DCH TDD Information to Modify

The *E-DCH TDD Information to Modify* IE is used for the modification of an E-DCH.

IE/Group Name	Presen	Range	IE Type and	Semantics	Criticality	Assigned
	ce		Reference	Description		Criticality
E-DCH MAC-d Flow Specific Information		0 <maxno ofEDCHM ACdFlows &gt;</maxno 			_	
>E-DCH MAC-d Flow ID	М		9.2.1.74		_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.58A		_	
>Maximum Number Of Retransmissions for E-DCH	0		9.2.1.81		_	
>E-DCH HARQ Power Offset TDD	0		9.2.3.61		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69		_	
>E-DCH Grant Type	0		9.2.3.53		_	
>E-DCH Logical Channel To Add	0		E-DCH Logical Channel Information 9.2.1.71		-	
>E-DCH Logical Channel To Modify	0		9.2.1.72		_	
>E-DCH Logical Channel To Delete		0 <maxno oflogicalch annels&gt;</maxno 			_	
>>Logical Channel ID	M		9.2.1.80		_	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.61a	LCR TDD only.	-	
MAC-e Reset Indicator	0		9.2.1.83		_	
E-DCH MAC-d PDU Size Format	0		9.2.1.74B		YES	reject

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows
maxnooflogicalchannels	Maximum number of logical channels

# 9.2.3.53 E-DCH Grant Type TDD

The E-DCH Grant Type identifies whether a MAC-d flow is scheduled or non-scheduled.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Grant Type			ENUMERATED	
			(Scheduled, Non-scheduled)	

#### 9.2.3.54 Timeslot Resource Related Information

The *Timeslot Resource Related Information* is a bitmap indicating which of the timeslots configured for E-DCH are allocated for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information			BIT STRING (13)	

#### 9.2.3.54a Timeslot Resource Related Information LCR

Only for 1.28Mcps TDD. The *Timeslot Resource Related Information LCR* IE is a bitmap indicating which of the timeslots configured for E-DCH are allocated for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information LCR			BIT STRING (5)	

### 9.2.3.55 Power Resource Related Information

The *Power Resource Related Information* specifies the maximum allowed E-PUCH power resource (dB relative to P<sub>e-base</sub>) that the UE may use for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Resource Related Information			INTEGER (132)	

### 9.2.3.56 E-PUCH Offset

The E-PUCH Offset represents the CFN offset at which a non-scheduled E-DCH grant begins.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-PUCH Offset			INTEGER (0255)	

#### 9.2.3.57 E-DCH TDD Maximum Bitrate

The E-DCH TDD Maximum Bitrate parameter indicates the Maximum Bitrate for an E-DCH in TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate			INTEGER (09201)	Bitrate on transport block level. Unit is kbits per second.

### 9.2.3.58 LTGI Presence

The *LTGI Presence* indicates to the Node B whether it shall use the Long Term Grant Indicator within E-DCH grants issued in a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
LTGI Indicator			BOOLEAN	True = LTGI shall be included

#### 9.2.3.59 E-HICH Time Offset

The E-HICH Time Offset (aka n<sub>E-HICH</sub> [19]) is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset			INTEGER (444)	

#### 9.2.3.59a E-HICH Time Offset LCR

Only for 1.28Mcps TDD. The E-HICH Time Offset LCR IE(aka n<sub>E-HICH</sub> [19]) is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset LCR			INTEGER (415)	

### 9.2.3.60 E-DCH TDD Capacity Consumption Law

The capacity consumption law indicates to the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the number of E-AGCH.

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Physical Shared Channel Reconfiguration.

When one are more radio links have been configured to use E-DCH (via Radio Link Setup, Radio Link Addition or radio link reconfiguration procedures) the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure that removes the last radio link configured for E-DCH.

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs and the UL costs shall be applied to the DL or Global Capacity Credit.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Cost	М		INTEGER (065535)	Cost per timeslot of the E-DCH. If not present, zero cost shall be applied.
DL Cost	0		INTEGER (065535)	Cost per E-AGCH or E-HICH configured. If not present, zero cost shall be applied

### 9.2.3.61 E-DCH HARQ Power Offset TDD

The *E-DCH HARQ Power Offset TDD* is the power offset measured in dB.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset TDD			INTEGER (06)	

#### 9.2.3.61a E-DCH MAC-d Flow Retransmission Timer

Only for 1.28Mcps TDD. The *E-DCH MAC-d Flow Retransmission Timer* IE is used in the E-DCH retransmission control as defined in [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Retransmission Timer			ENUMERATED (10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 110, 120, 140, 160, 200, 240, 280, 320, 400, 480, 560,)	Unit: ms Node B may use this value to stop the re-transmission of the corresponding MAC-e PDU.

## 9.2.3.62 SNPL Reporting Type

The *SNPL Reporting Type* indicates to the Node B whether the UEs in a cell shall use the type 1 or type 2 Serving and Neighbour Cell Pathloss metric [21].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SNPL Reporting Type			ENUMERATED (type1, type2)	

### 9.2.3.63 Maximum Generated Received Total Wide Band Power in Other Cells

The Maximum Generated Received Total Wide Band Power in Other Cells indicates the maximum aggregate UL interference that may be generated from scheduled transmissions into other (non-serving) cells.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Generated Received Total Wide Band Power in Other Cells			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in [23].

# 9.2.3.64 E-DCH Non-scheduled Grant Information 7.68Mcps TDD

The *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE is used to specify the details of a non-scheduled grant for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	M		9.2.3.54	
Power Resource Related Information	М		9.2.3.55	
Repetition Period	M		9.2.3.16	
Repetition Length	M		9.2.3.15	
TDD E-PUCH Offset	M		9.2.3.56	
TDD Channelisation Code 7.68Mcps	M		9.2.3.34	

## 9.2.3.65 E-DCH TDD Information 7.68Mcps

The *E-DCH TDD Information 7.68Mcps* specifies the details of the maximum bit rate and processing overload level for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate 7.68Mcps	0		9.2.3.66	
E-DCH Processing Overload Level	0		9.2.1.79	
E-DCH Power Offset for Scheduling Info	0		9.2.1.85	

# 9.2.3.66 E-DCH TDD Maximum Bitrate 7.68Mcps

The *E-DCH TDD Maximum Bitrate 7.68Mcps* parameter indicates the Maximum Bitrate for an E-DCH in 7.68Mcps TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate 7.68Mcps			INTEGER (017713,)	Bitrate on transport block level. Unit is kbits per second.

# 9.2.3.67 E-DCH Physical Layer Category LCR

Only for 1.28Mcps TDD. The *E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in LCR TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Physical Layer Category I CR			INTEGER(15)	As defined in [33]

# 9.2.3.67A Extended E-DCH Physical Layer Category LCR

Only for 1.28Mcps TDD. The *Extended E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in LCR TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended E-DCH Physical Laver Category LCR			INTEGER(6,)	As defined in [33]

# 9.2.3.68 E-HICH Type

The E-HICH Type IE identifies whether a E-HICH is scheduled or non-scheduled inside a cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Type			ENUMERATED (	
			Scheduled, Non-	
			scheduled)	

## 9.2.3.69 Maximum Target Received Total Wide Band Power LCR

The *Maximum Target Received Total Wide Band Power LCR* indicates the maximum target UL interference for a certain cell under CRNC, including received wide band power from all sources.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Maximum Target Received Total Wide Band Power LCR			INTEGER (0621)	The Value mapping is according to mapping for measurement type "Received Total Wide Band Power" in [23].

# 9.2.3.70 MBSFN Only Mode Indicator

The MBSFN only mode indicator indicates from CRNC to the Node B whether the cell is setup for MBSFN only mode for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Only Mode Indicator			ENUMERATED ( MBSFN Only Mode)	

## 9.2.3.71 MBSFN Only Mode Capability

This parameter defines the MBSFN only mode capability for a local cell for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Only Mode Capability			ENUMERATED ( MBSFN Only Mode capable, MBSFN Only Mode non capable)	

# 9.2.3.72 HS-DSCH Common System Information LCR

The *HS-DSCH Common System Information LCR* IE provides information for HS-DSCH configured for UE in Cell\_FACH, Cell\_PCH and URA\_PCH and Information related to BCCH modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Common Information LCR		01	11010101100	
>CCCH Priority Queue ID	М		Priority Queue ID 9.2.1.49C	
>SRB#1 Priority Queue ID	М		Priority Queue ID 9.2.1.49C	
>Associated Common MAC Flow LCR	M		Common MAC Flow ID LCR 9.2.3.76	The Common MAC Flow ID LCR shall be one of the flow IDs defined in the Common MAC Flow Specific Information of this IE or shall only refer to a Common MAC flow already existing in the old configuration.
>FACH Measurement Occasion Cycle Length Coefficient	0		9.2.1.111	
>BCCH Specific HS-DSCH RNTI Information LCR	0		9.2.3.89	
Common MAC Flow Specific Information LCR		0 <maxno ofCommon MACFlows LCR&gt;</maxno 		
>Common MAC Flow ID LCR	М		9.2.3.76	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>Common MAC Flow Priority Queue Information LCR		0 <maxno ofCommon MACQueu es&gt;</maxno 		
>>Priority Queue Information for Enhanced FACH	M		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>Transport Bearer Request Indicator	0		9.2.1.62A	Shouldn"t be contained if the MAC flow is setup in procedure. Should be contained if the MAC flow is modified in procedure
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies.
Common H-RNTI Information		0 <maxco mmonHR NTI&gt;</maxco 		,
>Common H-RNTI	М		HS-DSCH-RNTI 9.2.1.31J	
Sync Information		01		
>T-sync	М		ENUMERATED (40, 80, 120, 160, 200, 300, 400, 500,)	Units of MS.
>T-protect	M		ENUMERATED (40, 60, 80, 100, 120, 200, 400,)	Units of MS.
>N-protect	М		INTEGER (07)	

TDD ACK NACK Power Offset	0	9.2.3.18F 9.2.1.67A	
HS-SICH SIR Target	0	UL SIR	
		9.2.1.67A	
HS-SICH TPC step size	0	9.2.3.21a	

Range bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows for 1.28Mcps TDD
maxnoofCommonMACQueuesLCR	Maximum number of Priority Queues for Common MAC Flow for
	1.28Mcps TDD
maxCommonHRNTI	Maximum number of Common H-RNTI

# 9.2.3.73 HS-DSCH Paging System Information LCR

The *HS-DSCH Paging System Information LCR* IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information LCR		0 <maxno ofPagingM ACFlow&gt;</maxno 		
>Paging MAC Flow ID	M		9.2.1.113	
>HSDPA Associated PICH Information LCR	0		9.2.3.77	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>ToAWS	0		9.2.1.61	
>ToAWE	0		9.2.1.60	
>Paging MAC Flow Priority Queue Information LCR		0 <maxno ofPagingM ACQueues &gt;</maxno 		
>>Priority Queue Information for Enhanced PCH	M		Priority Queue Information for Enhanced FACH/PCH 9.2.1.117	
>Transport Bearer Request Indicator	0		9.2.1.62A	Shouldn"t be contained if the MAC flow is setup in procedure. Should be contained if the MAC flow is modified in procedure
HS-SCCH Power	0		DL Power 9.2.1.21	
HS-PDSCH Power	0		DL Power 9.2.1.21	
DTCH/DCCH Reception window size	0		INTEGER (116)	
N <sub>PCH</sub>	0		INTEGER (18)	
Paging Sub-Channel Size	0		INTEGER (13)	number of frames for a Paging sub-channel
Transport Block Size List		0 <maxno ofHS- DSCHTBS sE-PCH&gt;</maxno 		
>Transport Block Size Index for Enhanced PCH	М		INTEGER (132)	Index of the value range 1 to 32 of the MAC-ehs transport block size as specified in [32]

Range bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows
maxnoofPagingMACQueues	Maximum number of Priority Queues for Paging MAC Flow
maxnoofHS-DSCHTBSsE-PCH	Maximum number of HS-DSCH Transport Block Sizes used for
	Enhanced PCH operation associated HS-SCCH less

# 9.2.3.74 HS-DSCH Common System Information Response LCR

The *HS-DSCH Common System Information Response LCR* IE provides information for HS-DSCH configured for UE not in Cell\_DCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Specific Information Response LCR		0 <maxno OfHSSCC HsLCR&gt;</maxno 		
>HS SCCH ID LCR	M		9.2.3.88	
HARQ Memory Partitioning	0		9.2.1.102	
Common MAC Flow Specific Information Response LCR		0 <maxno ofCommon MACFlows LCR&gt;</maxno 		
>Common MAC Flow ID LCR	М		9.2.3.76	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.31Ha	

Range Bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows for 1.28Mcps TDD
maxNoOfHSSCCHsLCR	Maximum number of HS-SCCH codes for 1.28Mcps TDD

# 9.2.3.75 HS-DSCH Paging System Information Response LCR

The *HS-DSCH Paging System Information Response LCR* IE provides information for HS-DSCH configured for UE in Cell\_PCH and URA\_PCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flow Specific Information Response LCR		0 <maxno ofPagingM</maxno 		
mornation response Lore		ACFlow>		
>Paging MAC Flow ID	М		9.2.1.113	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
>HS-PDSCH DL Timeslot and Code Information LCR		0 <maxno ofDLtsLCR &gt;</maxno 		
>>Time Slot LCR	М		9.2.3.24A	
>>Midamble Shift LCR	M		9.2.3.7A	
>>Codes LCR		1 <maxno ofHSPDS CHs&gt;</maxno 		
>>>TDD Channelisation Code	М		9.2.3.19	

Range bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows
maxnoofDLtsLCR	Maximum number of Downlink time slots in a cell for 1.28Mcps TDD
maxnoofHSPDSCHs	Maximum number of HS-PDSCHs in one time slot of a Cell for 1.28Mcps TDD

# 9.2.3.76 Common MAC Flow ID LCR

The Common MAC Flow ID LCR IE is the unique identifier for one Common MAC flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flow ID LCR			INTEGER	
			(0255)	

#### 9.2.3.77 HSDPA Associated PICH Information LCR

The HSDPA Associated PICH Information LCR IE provides information for PICH used for Enhanced PCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE HSDPA PICH				
>Shared with PCH				
>>Common Physical	M		9.2.1.13	
Channel ID				
>Not shared with PCH LCR				
>>Common Physical	M		9.2.1.13	
Channel ID				
>> TDD Channelisation	M		9.2.3.19a	
Code LCR				
>> Time Slot LCR	М		9.2.3.24A	
>>Midamble Shift LCR	M		9.2.3.7A	
Offset				
>>TDD Physical Channel	M		9.2.3.20	
offset				
>>Repetition Period	М		9.2.3.16	
>>Repetition Length	M		9.2.3.15	
>>Paging Indicator Length	М		9.2.3.8	
>>PICH Power	М		9.2.1.49A	
>> Second TDD Code LCR	М		TDD Channelisation	
Code LCR			Code LCR 9.2.3.19a	
>>TSTD Indicator	0		9.2.1.64	

#### 9.2.3.78 Common MAC Flows To Delete LCR

The Common MAC Flows To Delete LCR IE is used for the removal of Common MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common MAC Flows To		1 <maxno< td=""><td></td><td></td></maxno<>		
Delete LCR		ofCommon		
		MACFlows		
		LCR>		
>Common MAC Flow ID LCR	М		9.2.3.76	

Range Bound	Explanation		
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows for 1.28Mcps TDD		

### 9.2.3.79 Common E-DCH System Information LCR

The *Common E-DCH System Information LCR* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Common MAC Flow Specific Information LCR		0 <maxno ofCommon MACFlows LCR&gt;</maxno 		
>UL Common MAC Flow ID	М		Common MAC Flow ID LCR 9.2.3.76	
>Transport Bearer Request Indicator	0		9.2.1.62A	
>Binding ID	0		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	0		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>TNL QoS	0		9.2.1.58A	Shall be ignored if bearer establishment with ALCAP.
>Payload CRC Presence Indicator	0		9.2.1.49	
>Common E-DCH MAC-d Flow Specific Information LCR	0		9.2.3.81	
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies.
Common E-PUCH Information LCR	0		9.2.3.83	
E-TFCS Information TDD	0		9.2.3.46	
Maximum Number of Retransmission for Scheduling Info LCR	0		Maximum Number of Retransmissions for E-DCH 9.2.1.81	
E-DCH Retransmission timer for Scheduling Info LCR	0		E-DCH MAC-d Flow Retransmission Timer 9.2.3.61a	

Range bound	Explanation	
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows	

### 9.2.3.80 Common E-DCH System Information Response LCR

The *Common E-DCH System Information Response LCR* IE provides information for E-DCH configured for UE in Cell\_FACH and Idle state that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Common MAC Flow Specific Information Response LCR		0 <maxno ofEDCHM ACFlowsL CR&gt;</maxno 		
>UL Common MAC Flow ID	M		Common MAC Flow ID LCR 9.2.3.76	
>Binding ID	0		9.2.1.4	
>Transport Layer Address	0		9.2.1.63	
E-AGCH Specific Information Response TDD		0 <maxno ofEAGCHs LCR&gt;</maxno 		
>E-AGCH ID TDD	M		9.2.3.51	
E-HICH Specific Information Response 1.28Mcps TDD		0 <maxno OfEHICHs LCR&gt;</maxno 		1.28Mcps TDD only
>EI	M		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.
>E-HICH ID TDD LCR	M		9.2.3.51a	
CCCH E-RNTI Information LCR	0		9.2.3.84	

Range bound	Explanation
maxnoofCommonMACFlowsLCR	Maximum number of Common MAC Flows
maxNoofEAGCHsLCR	Maximum number of E-AGCHs in a Cell
maxNoOfEHICHsLCR	Maximum number of E-HICHs in a Cell

# 9.2.3.81 Common E-DCH MAC-d Flow Specific Information LCR

The *Common E-DCH MAC-d Flow Specific Information LCR* IE is used for the establishment or modity Common E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information LCR		1 <maxno ofEDCHM ACdFlows LCR&gt;</maxno 		
>Common E-DCH MAC-d Flow ID	М		9.2.3.88	
>Maximum Number Of Retransmissions For E-DCH	0		9.2.1.81	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.69	
>Common E-DCH Logical Channel information	0	1 <maxno oflogicalch annels&gt;</maxno 		
>>Logical Channel ID	М		9.2.1.80	
>>Maximum MAC-c PDU Size Extended	0		MAC PDU Size Extended 9.2.1.38C	
>E-DCH HARQ Power Offset TDD	0		9.2.3.61	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.61a	

Range bound	Explanation
maxnoofEDCHMACdFlowsLCR	Maximum number of E-DCH MAC-d Flows for 1.28Mcps TDD
maxnooflogicalchannels	Maximum number of logical channels

### 9.2.3.82 Enhanced UE DRX Information LCR

The *Enhanced UE DRX Information LCR* IE provides information for configuring the UE in Cell\_FACH state to discontinuously reception for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T321	М		ENUMERATED (100, 200, 400, 800,)	Determines the time the UE waits until initiating DRX operation, in ms.
HS-DSCH DRX cycle <sub>FACH</sub>	М		ENUMERATED (4, 8, 16, 32,)	Determines the length of the DRX Cycle during DRX operation, in frames
HS-DSCH Rx burst <sub>FACH</sub>	М		ENUMERATED (2, 4, 8, 16,)	Determines the period within the DRX Cycle that the UE continuously receives HS- DSCH, in frames

#### 9.2.3.83 Common E-PUCH Information LCR

The *Common E-PUCH Information LCR* IE provides parameters to configure the E-PUCH physical channel for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum code rate	М		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
Maximum code rate	M		INTEGER (063)	Unit: - Range: 0.0551 Step: 0.015
HARQ Info for E-DCH	M		ENUMERATED (rv0, rvtable)	'rv0' indicates that the UE will only use E_DCH RV index 0. 'rvtable' indicates that the UE will use an RSN based RV index as specified in [8]
PRXdes_base per UARFCN		0 <maxfre quencyinC ell&gt;</maxfre 		
>PRXdes_base	M		INTEGER (-11250)	dBm. Reference Desired RX power level for E-PUCH. Reference to Pe-base in [21]
>UARFCN	0		9.2.1.65	Corresponds to Nt [15] Applicable for 1.28Mcps TDD when using multiple frequencies.
E-PUCH TPC Step Size	0		TDD TPC UL Step Size 9.2.3.21a	
E-AGCH TPC Step Size	0		TDD TPC DL Step Size 9.2.3.21	
E-PUCH Power Control GAP	0		INTEGER (1255)	Unit: Number of subframes. Reference to E-PUCH Power Control for 1.28Mcps TDD in [21]. If it is not present, UE shall deem it to be infinite in which case closed loop power control shall always be used.

Range bound	Explanation
maxFrequencyinCell	Maximum number of Frequencies that can be defined in a Cell

### 9.2.3.84 Common E-RNTI Information LCR

The  $Common\ E$ - $RNTI\ Information\ LCR\ IE\ provides\ parameters\ to\ configure\ the\ common\ E$ - $RNTI\ used\ in\ enhanced\ CELL\_FACH\ and\ Idle\ mode.$ 

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-RNTI		1 <maxno< th=""><th></th><th></th></maxno<>		
Information LCR		ofERUCC		
		HsLCR>		
>Starting E-RNTI	M		9.2.1.75	
>Number of group	M		INTEGER (132)	
>Number of E-RNTI per	M		INTEGER (17)	
group				

Range bound	Explanation	
maxnoofERUCCHsLCR	Maximum number of E-RUCCH that can be defined in a Cell	

#### 9.2.3.85 Paging MAC Flows To Delete LCR

The Paging MAC Flows To Delete LCR IE is used for the removal of Paging MAC flows from a Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging MAC Flows To Delete LCR		1 <maxno ofPagingM</maxno 		
		ACFlow>		
>Paging MAC Flow ID	М		9.2.1.113	

Range Bound	Explanation
maxnoofPagingMACFlow	Maximum number of Paging MAC Flows

#### 9.2.3.86 Common E-DCH MAC-d Flows To Delete LCR

The Common E-DCH MAC-d Flows To Delete LCR IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flows To Delete		1 <maxno ofCommon EDCHMA CdFlowsL CR&gt;</maxno 		
>Common E-DCH MAC-d Flow ID LCR	M		9.2.3.87	

Range Bound	Explanation		
maxnoofCommonEDCHMACdFlowsLCR	Maximum number of common E-DCH MAC-d flows		

#### 9.2.3.87 Common E-DCH MAC-d Flow ID LCR

The Common E-DCH MAC-d Flow ID LCR IE is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow ID LCR			INTEGER (0255)	

#### 9.2.3.88 HS-SCCH ID LCR

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SCCH ID LCR			INTEGER (0255)	

#### 9.2.3.89 BCCH Specific HS-DSCH RNTI Information LCR

The *BCCH Specific HS-DSCH RNTI Information* IE provides information for BCCH Transmission using HS-DSCH for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BCCH Specific HS-DSCH	M		HS-DSCH-RNTI	
RNTI			9.2.1.31J	
HS-SCCH Power	M		DL Power	
			9.2.1.21	
HS-PDSCH Power	M		DL Power	
			9.2.1.21	

# 9.3 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, UEStatusUpdateCommand

#### FROM NBAP-PDU-Contents

id-audit, id-auditRequired, id-blockResource, id-cellDeletion. id-cellReconfiguration, id-cellSetup, id-cellSynchronisationInitiation, id-cellSynchronisationReconfiguration, id-cellSynchronisationReporting, id-cellSynchronisationTermination, id-cellSynchronisationFailure, id-commonMeasurementFailure, id-commonMeasurementInitiation, id-commonMeasurementReport, id-commonMeasurementTermination, id-commonTransportChannelDelete, id-commonTransportChannelReconfigure, id-commonTransportChannelSetup, id-compressedModeCommand, id-dedicatedMeasurementFailure, id-dedicatedMeasurementInitiation, id-dedicatedMeasurementReport, id-dedicatedMeasurementTermination. id-downlinkPowerControl, id-downlinkPowerTimeslotControl. id-errorIndicationForDedicated. id-errorIndicationForCommon, id-informationExchangeFailure, id-informationExchangeInitiation, id-informationReporting, id-informationExchangeTermination, id-BearerRearrangement,

id-mBMSNotificationUpdate,

```
id-physicalSharedChannelReconfiguration,
   id-privateMessageForDedicated,
   id-privateMessageForCommon,
   id-radioLinkActivation,
   id-radioLinkAddition.
   id-radioLinkDeletion,
   id-radioLinkFailure,
   id-radioLinkParameterUpdate,
   id-radioLinkPreemption,
   id-radioLinkRestoration,
   id-radioLinkSetup,
   id-reset.
   id-resourceStatusIndication,
   id-cellSynchronisationAdjustment,
   id-synchronisedRadioLinkReconfigurationCancellation,
   id-synchronisedRadioLinkReconfigurationCommit,
   id-synchronisedRadioLinkReconfigurationPreparation,
   id-systemInformationUpdate,
   id-unblockResource,
   id-unSynchronisedRadioLinkReconfiguration,
   id-uEStatusUpdate
FROM NBAP-Constants;
  *****************
-- Interface Elementary Procedure Class
__ *********************
NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
   &InitiatingMessage
   &SuccessfulOutcome
                                    OPTIONAL,
   &UnsuccessfulOutcome
                                    OPTIONAL,
                                    OPTIONAL,
   &Outcome
   &messageDiscriminator
                                    MessageDiscriminator,
   &procedureID
                                     ProcedureID
                                                   UNIOUE,
   &criticality
                                    Criticality
                                                   DEFAULT ignore
WITH SYNTAX {
                                     &InitiatingMessage
   INITIATING MESSAGE
   [SUCCESSFUL OUTCOME
                                     &SuccessfulOutcome]
                                     &UnsuccessfulOutcomel
    [UNSUCCESSFUL OUTCOME
   [OUTCOME
                                     &Outcome1
                                     &messageDiscriminator
   MESSAGE DISCRIMINATOR
                                     &procedureID
   PROCEDURE ID
                                     &criticality]
    [CRITICALITY
    ****************
-- Interface PDU Definition
```

```
__ *********************
NBAP-PDU ::= CHOICE {
   initiatingMessage
                           InitiatingMessage,
    succesfulOutcome
                           SuccessfulOutcome.
   unsuccesfulOutcome
                           UnsuccessfulOutcome,
   outcome
                           Outcome,
    . . .
InitiatingMessage ::= SEQUENCE
                           NBAP-ELEMENTARY-PROCEDURE. &procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
   procedureID
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality
   messageDiscriminator
                          NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID
                          TransactionID.
    value
                           NBAP-ELEMENTARY-PROCEDURE.&InitiatingMessage({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
SuccessfulOutcome ::= SEQUENCE
   procedureID
                           NBAP-ELEMENTARY-PROCEDURE. & procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
   criticality
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   messageDiscriminator
                          NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID
                          TransactionID,
                           NBAP-ELEMENTARY-PROCEDURE. &SuccessfulOutcome ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
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
                           NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality
   messageDiscriminator
                           NBAP-ELEMENTARY-PROCEDURE. & messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID
                           TransactionID,
    value
                           NBAP-ELEMENTARY-PROCEDURE. &Outcome ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
     ****************
  Interface Elementary Procedure List
NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
   NBAP-ELEMENTARY-PROCEDURES-CLASS-1
   NBAP-ELEMENTARY-PROCEDURES-CLASS-2
    . . .
```

```
NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::= {
    cellSetupFDD
    cellSetupTDD
    cellReconfigurationFDD
    cellReconfigurationTDD
    cellDeletion
    commonTransportChannelSetupFDD
    commonTransportChannelSetupTDD
    commonTransportChannelReconfigureFDD
    commonTransportChannelReconfigureTDD
    commonTransportChannelDelete
    audit
   blockResource
    radioLinkSetupFDD
    radioLinkSetupTDD
    systemInformationUpdate
    commonMeasurementInitiation
    radioLinkAdditionFDD
    radioLinkAdditionTDD
    radioLinkDeletion
    reset
    synchronisedRadioLinkReconfigurationPreparationFDD
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    dedicatedMeasurementInitiation
    physicalSharedChannelReconfigurationTDD
    informationExchangeInitiation
    cellSynchronisationInitiationTDD
    cellSynchronisationReconfigurationTDD
    cellSynchronisationAdjustmentTDD
    physicalSharedChannelReconfigurationFDD
NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::=
    resourceStatusIndication
    auditReguired
    commonMeasurementReport
    commonMeasurementTermination
    commonMeasurementFailure
    synchronisedRadioLinkReconfigurationCommit
    synchronisedRadioLinkReconfigurationCancellation
    radioLinkFailure
    radioLinkPreemption
    radioLinkRestoration
    dedicatedMeasurementReport
    dedicatedMeasurementTermination
    dedicatedMeasurementFailure
    downlinkPowerControlFDD
    downlinkPowerTimeslotControl
    compressedModeCommand
    unblockResource
    errorIndicationForDedicated
```

```
errorIndicationForCommon
   privateMessageForDedicated
   privateMessageForCommon
    informationReporting
    informationExchangeTermination
    informationExchangeFailure
    cellSynchronisationReportingTDD
    cellSynchronisationTerminationTDD
    cellSynchronisationFailureTDD
   bearerRearrangement
    radioLinkActivationFDD
   radioLinkActivationTDD
    radioLinkParameterUpdateFDD
    radioLinkParameterUpdateTDD
   mBMSNotificationUpdate
   uEStatusUpdate
-- Interface Elementary Procedures
     *****************
-- Class 1
-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                           CellSetupRequestFDD
   INITIATING MESSAGE
   SUCCESSFUL OUTCOME
                           CellSetupResponse
   UNSUCCESSFUL OUTCOME
                           CellSetupFailure
   MESSAGE DISCRIMINATOR
                           { procedureCode id-cellSetup, ddMode fdd }
   PROCEDURE ID
   CRITICALITY
                           reject
-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                           CellSetupRequestTDD
    INITIATING MESSAGE
                           CellSetupResponse
   SUCCESSFUL OUTCOME
                           CellSetupFailure
   UNSUCCESSFUL OUTCOME
   MESSAGE DISCRIMINATOR
                           common
   PROCEDURE ID
                           { procedureCode id-cellSetup, ddMode tdd }
    CRITICALITY
                           reject
-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           CellReconfigurationRequestFDD
    SUCCESSFUL OUTCOME
                           CellReconfigurationResponse
   UNSUCCESSFUL OUTCOME
                           CellReconfigurationFailure
   MESSAGE DISCRIMINATOR
```

```
{ procedureCode id-cellReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** CellReconfiguration(TDD) ***
cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellReconfigurationRequestTDD
                            CellReconfigurationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            CellReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-cellReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CellDeletion ***
cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellDeletionRequest
    INITIATING MESSAGE
                            CellDeletionResponse
    SUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-cellDeletion, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelSetupRequestFDD
                            CommonTransportChannelSetupResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelSetup, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            CommonTransportChannelSetupRequestTDD
    SUCCESSFUL OUTCOME
                            CommonTransportChannelSetupResponse
                            CommonTransportChannelSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-commonTransportChannelSetup, ddMode tdd }
    CRITICALITY
                            reject
-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonTransportChannelReconfigurationRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationResponse
                            CommonTransportChannelReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelReconfigure (TDD) ***
```

```
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelReconfigurationRequestTDD
                            CommonTransportChannelReconfigurationResponse
    SUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelDeletionRequest
    SUCCESSFUL OUTCOME
                            CommonTransportChannelDeletionResponse
    MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-commonTransportChannelDelete, ddMode common }
    PROCEDURE ID
    CRITICALITY
-- *** Audit ***
audit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            AuditRequest
                            AuditResponse
    SUCCESSFUL OUTCOME
                            AuditFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-audit, ddMode common }
    CRITICALITY
                            reject
-- *** BlockResourceRequest ***
blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            BlockResourceRequest
    SUCCESSFUL OUTCOME
                            BlockResourceResponse
    UNSUCCESSFUL OUTCOME
                            BlockResourceFailure
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-blockResource, ddMode common }
    CRITICALITY
                            reject
-- *** RadioLinkSetup (FDD) ***
radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkSetupRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkSetupResponseFDD
                            RadioLinkSetupFailureFDD
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-radioLinkSetup, ddMode fdd }
    CRITICALITY
                            reject
-- *** RadioLinkSetup (TDD) ***
radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkSetupRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkSetupResponseTDD
                            RadioLinkSetupFailureTDD
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
```

```
{ procedureCode id-radioLinkSetup, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** SystemInformationUpdate ***
systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            SystemInformationUpdateRequest
    SUCCESSFUL OUTCOME
                            SystemInformationUpdateResponse
    UNSUCCESSFUL OUTCOME
                            SystemInformationUpdateFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-systemInformationUpdate, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResetRequest
    SUCCESSFUL OUTCOME
                            ResetResponse
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-reset, ddMode common }
    CRITICALITY
                            reject
-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
                            CommonMeasurementInitiationRequest
    INITIATING MESSAGE
                            CommonMeasurementInitiationResponse
    SUCCESSFUL OUTCOME
                            CommonMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-commonMeasurementInitiation, ddMode common }
    CRITICALITY
                            reject
-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkAdditionRequestFDD
                            RadioLinkAdditionResponseFDD
    SUCCESSFUL OUTCOME
                            RadioLinkAdditionFailureFDD
    UNSUCCESSFUL OUTCOME
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkAddition, ddMode fdd }
    CRITICALITY
                            reject
-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkAdditionRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkAdditionResponseTDD
    UNSUCCESSFUL OUTCOME
                            RadioLinkAdditionFailureTDD
                            dedicated
    MESSAGE DISCRIMINATOR
                            { procedureCode id-radioLinkAddition, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
```

```
-- *** RadioLinkDeletion
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME
                            RadioLinkDeletionResponse
                           dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY
                            reject
-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationReady
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkReconfigurationPrepareTDD
    INITIATING MESSAGE
                            RadioLinkReconfigurationReady
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                            dedicated
    MESSAGE DISCRIMINATOR
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkReconfigurationRequestFDD
                            RadioLinkReconfigurationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    CRITICALITY
                            reject
-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkReconfigurationRequestTDD
                            RadioLinkReconfigurationResponse
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    CRITICALITY
                            reject
-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DedicatedMeasurementInitiationRequest
                            DedicatedMeasurementInitiationResponse
    SUCCESSFUL OUTCOME
```

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```
DedicatedMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    CRITICALITY
-- *** PhysicalSharedChannelReconfiguration (FDD) ***
physicalSharedChannelReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE PhysicalSharedChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME PhysicalSharedChannelReconfigurationResponse
                            PhysicalSharedChannelReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    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
                        { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                        reject
-- *** InformationExchangeInitiation ***
informationExchangeInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeInitiationRequest
    SUCCESSFUL OUTCOME
                            InformationExchangeInitiationResponse
    UNSUCCESSFUL OUTCOME
                            InformationExchangeInitiationFailure
    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
                            common
                        { 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
    PROCEDURE ID
                        { procedureCode id-cellSynchronisationAdjustment, ddMode tdd }
    CRITICALITY
                        reject
-- Class 2
-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
                            ResourceStatusIndication
    INITIATING MESSAGE
                           common
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-resourceStatusIndication, ddMode common }
    CRITICALITY
                            ignore
-- *** AuditRequired ***
auditRequired NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            AuditRequiredIndication
    MESSAGE DISCRIMINATOR
                            { procedureCode id-auditRequired, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementReport
   MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-commonMeasurementReport, ddMode common
    CRITICALITY
                            ignore
-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-commonMeasurementTermination, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CommonMeasurementFailure ***
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementFailureIndication
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonMeasurementFailure, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
```

```
-- *** SynchronisedRadioLinkReconfigurationCommit ***
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationCommit
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY
                            ignore
-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationCancel
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                             procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common
    CRITICALITY
-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkFailureIndication
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-radioLinkFailure, ddMode common
    CRITICALITY
                            ignore
-- *** RadioLinkPreemption ***
radioLinkPreemption NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkPreemptionRequiredIndication
    MESSAGE DISCRIMINATOR
                           dedicated
                        { procedureCode id-radioLinkPreemption, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
-- *** RadioLinkRestoration ***
radioLinkRestoration NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkRestoreIndication
   MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
                            DedicatedMeasurementReport
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-dedicatedMeasurementReport, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DedicatedMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    CRITICALITY
                            ignore
```

```
-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            DedicatedMeasurementFailureIndication
   MESSAGE DISCRIMINATOR dedicated
                            { procedureCode id-dedicatedMeasurementFailure, ddMode common }
   PROCEDURE ID
    CRITICALITY
                            ignore
-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DL-PowerControlRequest
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-downlinkPowerControl, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DL-PowerTimeslotControlRequest
   MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
                            CompressedModeCommand
    INITIATING MESSAGE
                            dedicated
    MESSAGE DISCRIMINATOR
                            { procedureCode id-compressedModeCommand, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            UnblockResourceIndication
    MESSAGE DISCRIMINATOR
                            { procedureCode id-unblockResource, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ErrorIndication
   MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-errorIndicationForDedicated, ddMode common }
    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
    PROCEDURE ID
                            { procedureCode id-cellSynchronisationReporting, ddMode tdd }
    CRITICALITY
                            ignore
-- *** CellSynchronisationTermination (TDD only) ***
cellSynchronisationTerminationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellSynchronisationTerminationRequestTDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                              procedureCode id-cellSynchronisationTermination, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CellSynchronisationFailure (TDD only) ***
cellSynchronisationFailureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellSynchronisationFailureIndicationTDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-cellSynchronisationFailure, ddMode tdd }
    CRITICALITY
                            ignore
-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
    MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-privateMessageForDedicated, ddMode common }
    CRITICALITY
                            ignore
-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
    MESSAGE DISCRIMINATOR
                              procedureCode id-privateMessageForCommon, ddMode common
    PROCEDURE ID
    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
-- *** InformationExchangeFailure ***
informationExchangeFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeFailureIndication
    MESSAGE DISCRIMINATOR
                            { procedureCode id-informationExchangeFailure, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** BearerRearrangement ***
bearerRearrangement NBAP-ELEMENTARY-PROCEDURE ::= {
                            BearerRearrangementIndication
    INITIATING MESSAGE
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-BearerRearrangement, ddMode common }
    CRITICALITY
                            ignore
-- *** RadioLinkActivation (FDD) ***
radioLinkActivationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkActivationCommandFDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkActivation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** RadioLinkActivation (TDD) ***
radioLinkActivationTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkActivationCommandTDD
   MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkActivation, ddMode tdd
    CRITICALITY
                            ignore
-- *** RadioLinkParameterUpdate (FDD) ***
radioLinkParameterUpdateFDD NBAP-ELEMENTARY-PROCEDURE ::=
                            {\tt RadioLinkParameterUpdateIndicationFDD}
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkParameterUpdate, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** RadioLinkParameterUpdate (TDD) ***
radioLinkParameterUpdateTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            RadioLinkParameterUpdateIndicationTDD
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkParameterUpdate, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
```

```
-- *** MBMSNotificationUpdate ***
mBMSNotificationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                          MBMSNotificationUpdateCommand
   MESSAGE DISCRIMINATOR common
    PROCEDURE ID
                           { procedureCode id-mBMSNotificationUpdate, ddMode common }
    CRITICALITY
                           ignore
-- *** UEStatusUpdate ***
uEStatusUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           UEStatusUpdateCommand
   MESSAGE DISCRIMINATOR common
    PROCEDURE ID
                           { procedureCode id-uEStatusUpdate, ddMode fdd }
    CRITICALITY
                           ignore
```

#### 9.3.3 PDU Definitions

END

```
******************
-- PDU definitions for NBAP.
__ ********************
NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
  *****************
-- IE parameter types from other modules.
  *****************
   Active-Pattern-Sequence-Information,
   AddorDeleteIndicator,
   AICH-Power,
   AICH-TransmissionTiming,
   AllocationRetentionPriority,
   AlternativeFormatReportingIndicator,
   AvailabilityStatus,
   BCCH-ModificationTime,
   BindingID,
   BlockingPriorityIndicator,
```

```
BroadcastReference,
SCTD-Indicator,
Cause.
CCTrCH-ID,
Cell-ERNTI-Status-Information.
CellParameterID,
CellPortionID.
CellSvncBurstCode,
CellSyncBurstCodeShift,
CellSyncBurstRepetitionPeriod,
CellSyncBurstSIR,
CellSyncBurstTiming,
CellSyncBurstTimingThreshold,
CFN.
ChipOffset,
C-ID,
Closedlooptimingadjustmentmode,
CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
Common-MACFlows-to-DeleteFDD,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
CommonPhysicalChannelID768,
Common-EDCH-Capability,
Common-EDCH-System-InformationFDD,
Common-EDCH-System-Information-ResponseFDD,
Common-PhysicalChannel-Status-Information,
Common-PhysicalChannel-Status-Information768,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
ContinuousPacketConnectivityDTX-DRX-Capability,
ContinuousPacketConnectivityDTX-DRX-Information,
ContinuousPacketConnectivityHS-SCCH-less-Capability,
ContinuousPacketConnectivityHS-SCCH-less-Information,
ContinuousPacketConnectivityHS-SCCH-less-Information-Response,
CPC-Information,
CriticalityDiagnostics,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID.
DCH-FDD-Information.
DCH-Indicator-For-E-DCH-HSDPA-Operation,
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.
DPCH-ID768.
DSCH-ID,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
E-AGCH-FDD-Code-Information,
E-AI-Capability,
E-DCH-Capability,
E-DCHCapacityConsumptionLaw,
E-DCH-TTI2ms-Capability,
E-DCH-SF-Capability,
E-DCH-HARQ-Combining-Capability,
E-DCH-FDD-DL-Control-Channel-Information,
E-DCH-FDD-Information,
E-DCH-FDD-Information-Response,
E-DCH-FDD-Information-to-Modify,
E-DCH-FDD-Update-Information,
E-DCH-MACdFlow-ID,
E-DCH-MACdFlows-Information,
E-DCH-MACdFlows-to-Delete,
E-DCH-MACdPDU-SizeCapability,
E-DCH-RL-Indication,
E-DCH-Serving-Cell-Change-Info-Response,
E-DPCCH-PO,
E-RGCH-E-HICH-FDD-Code-Information,
E-RGCH-2-IndexStepThreshold,
E-RGCH-3-IndexStepThreshold,
End-Of-Audit-Sequence-Indicator,
Enhanced-FACH-Capability,
```

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Enhanced-PCH-Capability,
Enhanced-UE-DRX-Capability,
Enhanced-UE-DRX-InformationFDD.
E-TFCS-Information.
E-TTI.
ExtendedPropagationDelay,
Fast-Reconfiguration-Mode,
Fast-Reconfiguration-Permission,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-FrameOffset,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
F-DPCH-Capability,
F-DPCH-SlotFormat,
F-DPCH-SlotFormatCapability,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HARQ-Info-for-E-DCH,
HSDPA-Capability,
HSDSCH-Common-System-InformationFDD,
HSDSCH-Common-System-Information-ResponseFDD,
HSDSCH-Configured-Indicator,
HSDSCH-Paging-System-InformationFDD,
HSDSCH-Paging-System-Information-ResponseFDD,
HS-DSCH-Serving-Cell-Change-Info,
HS-DSCH-Serving-Cell-Change-Info-Response,
HSDSCH-MACdPDU-SizeCapability,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information.
HS-SICH-ID,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
Initial-DL-DPCH-TimingAdjustment-Allowed,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator.
IPDL-TDD-Parameters-LCR,
IPMulticastIndication,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
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Maximum-Target-ReceivedTotalWideBandPower,
MaximumTransmissionPower,
MaxNrOfUL-DPDCHs.
Max-Set-E-DPDCHs,
MaxPRACH-MidambleShifts,
Max-UE-DTX-Cycle,
MBMS-Capability,
MeasurementFilterCoefficient,
MeasurementID,
MeasurementRecoveryBehavior,
MeasurementRecoveryReportingIndicator,
MeasurementRecoverySupportIndicator,
MICH-CFN.
MICH-Mode.
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftAndBurstType768,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MIMO-Capability,
MIMO-PilotConfiguration,
MinUL-ChannelisationCodeLength,
Modification-Period,
MultiplexingPosition,
NCvclesPerSFNperiod,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NI-Information,
NodeB-CommunicationContextID,
NotificationIndicatorLength,
NumberOfReportedCellPortions,
NSubCyclesPerCyclePeriod,
PagingIndicatorLength,
Paging-MACFlows-to-DeleteFDD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PDSCHSet-ID,
PDSCH-ID,
PDSCH-ID768,
PICH-Mode,
PICH-Power,
PLCCHinformation.
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
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PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
Primary-CPICH-Usage-for-Channel-Estimation,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
OE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers.
Reference-ReceivedTotalWideBandPower,
Reference-ReceivedTotalWideBandPowerReporting,
Reference-ReceivedTotalWideBandPowerSupportIndicator,
Maximum-Target-ReceivedTotalWideBandPower-LCR,
ReferenceClockAvailability,
ReferenceSFNoffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
RL-Specific-DCH-Info,
RL-Specific-E-DCH-Info,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
Secondary-CPICH-Information-Change,
SecondaryCCPCH-SlotFormat,
Segment-Type,
Serving-E-DCH-RL-ID,
SixteenOAM-UL-Capability,
SixtyfourOAM-DL-Capability,
SixtyfourQAM-DL-MIMO-Combined-Capability,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateOuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
E-DPCCH-Power-Boosting-Capability,
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SyncCase,
SYNCDlCodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR.
TDD-ChannelisationCode768,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset.
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
TnlOos,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
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,
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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,
CellSvncBurstTimingLCR,
TimingAdjustmentValueLCR,
PrimaryCCPCH-RSCP-Delta,
SynchronisationIndicator,
TDD-UL-Code-768-Information,
UL-Timeslot768-Information,
TDD-DL-Code-768-Information,
DL-Timeslot768-Information,
E-DCH-TDD-CapacityConsumptionLaw,
E-DCH-Information,
E-DCH-Information-Response,
E-DCH-Information-Reconfig,
LTGI-Presence,
SNPL-Reporting-Type,
E-AGCH-Id,
E-HICH-TimeOffset,
Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells,
E-DCH-768-Information,
E-DCH-768-Information-Reconfig,
RTWP-ReportingIndicator,
RTWP-CellPortion-ReportingIndicator,
MAChs-ResetIndicator,
E-DCH-LCR-Information,
E-DCH-LCR-Information-Reconfig.
E-HICH-ID-TDD.
E-HICH-TimeOffsetLCR,
E-HICH-Type,
ModulationPO-MBSFN,
Secondary-CCPCH-SlotFormat-Extended,
ModulationMBSFN,
MBSFN-Only-Mode-Indicator,
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MBSFN-Only-Mode-Capability,
    UPPCHPositionLCR.
    ControlGAP.
    Extended-HS-SICH-ID.
    Extended-HS-SCCH-ID.
    TimeslotLCR-Extension,
    Extended-E-HICH-ID-TDD.
    AdditionalTimeSlotListLCR,
    AdditionalMeasurementValueList,
    HS-SCCH-ID-LCR,
    Paging-MACFlows-to-DeleteLCR,
    HSDSCH-Paging-System-InformationLCR,
    HSDSCH-Paging-System-Information-ResponseLCR,
    HSDSCH-Common-System-InformationLCR,
    HSDSCH-Common-System-Information-ResponseLCR,
    Enhanced-UE-DRX-InformationLCR,
    E-DCH-MACdFlow-ID-LCR,
    Common-EDCH-System-InformationLCR,
    Common-EDCH-System-Information-ResponseLCR,
    Common-MACFlows-to-DeleteLCR,
    DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst,
    E-DCH-MACdFlows-to-DeleteLCR,
    HSDSCH-PreconfigurationSetup,
    HSDSCH-PreconfigurationInfo.
    NoOfTargetCellHS-SCCH-Order,
    EnhancedHSServingCC-Abort,
    GANSS-Time-ID,
    HS-DSCH-FDD-Secondary-Serving-Update-Information,
    HS-DSCH-Secondary-Serving-Remove,
    HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised,
    HS-DSCH-Secondary-Serving-Information-To-Modify,
    HS-DSCH-Secondary-Serving-Cell-Change-Information-Response,
   HS-DSCH-FDD-Secondary-Serving-Information-Response,
    HS-DSCH-FDD-Secondary-Serving-Information,
   Multi-Cell-Capability-Info,
   MinimumReducedE-DPDCH-GainFactor,
    IMB-Parameters,
    E-RNTI
FROM NBAP-IEs
    PrivateIE-Container{},
    ProtocolExtensionContainer{},
    ProtocolIE-Container{},
    ProtocolIE-Single-Container{},
    ProtocolIE-ContainerList{},
    NBAP-PRIVATE-IES.
   NBAP-PROTOCOL-IES,
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers
    id-Active-Pattern-Sequence-Information,
    id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD,
    id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD,
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id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRgstTDD,
id-AdiustmentRatio.
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRostFDD.
id-AlternativeFormatReportingIndicator,
id-BCH-Information,
id-BCCH-ModificationTime,
id-bindingID,
id-BlockingPriorityIndicator,
id-BroadcastReference,
id-Cause.
id-CauseLevel-PSCH-ReconfFailure.
id-CauseLevel-RL-AdditionFailureFDD.
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-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-AdditionRqstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRgstTDD,
id-CellAdjustmentInfo-SyncAdjustmntRgstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRgstTDD,
id-Cell-ERNTI-Status-Information,
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-CellPortion-InformationItem-Cell-ReconfRqstFDD,
id-CellPortion-InformationList-Cell-ReconfRgstFDD,
id-CellSyncBurstTransInit-CellSyncInitiationRgstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRgstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRgstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD.
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-Common-EDCH-Capability,
id-Common-EDCH-MACdFlows-to-DeleteFDD,
id-Common-EDCH-System-InformationFDD,
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id-Common-EDCH-System-Information-ResponseFDD,
id-Common-MACFlows-to-DeleteFDD.
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-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-Common-UL-MACFlows-to-DeleteFDD,
id-CommunicationContextInfoItem-Reset.
id-CommunicationControlPortID.
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-ContinuousPacketConnectivityDTX-DRX-Capability,
id-ContinuousPacketConnectivityDTX-DRX-Information,
id-ContinuousPacketConnectivityHS-SCCH-less-Capability,
id-ContinuousPacketConnectivityHS-SCCH-less-Information,
id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response,
id-CPC-Information,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information.
id-DCH-Indicator-For-E-DCH-HSDPA-Operation,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-FDD-S-CCPCH-FrameOffset-CTCH-SetupRgstFDD,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectTvpe-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,
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id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRastTDD.
id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD.
id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRgstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationModifvList-RL-ReconfPrepTDD.
id-DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-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-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-TDD-Information,
id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code,
id-E-AI-Capability,
id-E-AGCH-FDD-Code-Information,
id-E-DCH-Capability,
id-E-DCH-TTI2ms-Capability,
id-E-DCH-SF-Capability,
id-E-DCH-HARO-Combining-Capability,
id-E-DCH-FDD-DL-Control-Channel-Information,
id-E-DCH-FDD-Information.
id-E-DCH-FDD-Information-Response,
id-E-DCH-FDD-Information-to-Modify,
id-E-DCH-FDD-Update-Information,
id-E-DCH-MACdFlows-to-Add,
id-E-DCH-MACdFlows-to-Delete,
id-E-DCH-RearrangeList-Bearer-RearrangeInd,
id-E-DCH-Resources-Information-AuditRsp,
id-E-DCH-Resources-Information-ResourceStatusInd,
id-E-DCH-RL-Indication,
id-E-DCH-RL-Set-ID,
id-E-DCH-Serving-Cell-Change-Info-Response,
id-E-DCH-CapacityConsumptionLaw,
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id-E-DPCH-Information-RL-ReconfPrepFDD,
id-E-DPCH-Information-RL-ReconfRastFDD.
id-E-DPCH-Information-RL-SetupRostFDD.
id-E-DPCH-Information-RL-AdditionRegFDD,
id-E-RGCH-E-HICH-FDD-Code-Information.
id-ERACH-CM-Rast,
id-ERACH-CM-Rsp,
id-ERACH-CM-Rort,
id-End-Of-Audit-Sequence-Indicator,
id-Enhanced-FACH-Capability,
id-Enhanced-PCH-Capability,
id-Enhanced-UE-DRX-Capability,
id-Enhanced-UE-DRX-InformationFDD.
id-ExtendedPropagationDelay,
id-FACH-Information.
id-FACH-ParametersList-CTCH-ReconfRgstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRgstFDD,
id-FACH-ParametersListIE-CTCH-SetupRgstFDD,
id-FACH-ParametersListIE-CTCH-SetupRgstTDD,
id-Fast-Reconfiguration-Mode,
id-Fast-Reconfiguration-Permission,
id-F-DPCH-Capability,
id-F-DPCH-Information-RL-ReconfPrepFDD.
id-F-DPCH-Information-RL-SetupRqstFDD,
id-F-DPCH-SlotFormat,
id-F-DPCH-SlotFormatCapability,
id-HSDPA-And-EDCH-CellPortion-Information-PSCH-ReconfRqst,
id-HSDSCH-Configured-Indicator,
id-HS-DSCH-Serving-Cell-Change-Info,
id-HS-DSCH-Serving-Cell-Change-Info-Response,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rgst,
id-InformationExchangeObjectType-InfEx-Rsp.
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-Initial-DL-DPCH-TimingAdjustment,
id-Initial-DL-DPCH-TimingAdjustment-Allowed,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRgstFDD,
id-IPDLParameter-Information-Cell-SetupRgstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRgstTDD,
id-IPMulticastIndication,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRgstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
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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-MaxAdiustmentStep,
id-MaximumTransmissionPower,
id-Max-UE-DTX-Cvcle,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MeasurementRecoveryBehavior,
id-MeasurementRecoveryReportingIndicator,
id-MeasurementRecoverySupportIndicator,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRgst,
id-MBMS-Capability,
id-MICH-CFN,
id-MICH-Information-AuditRsp,
id-MICH-Information-ResourceStatusInd,
id-MICH-Parameters-CTCH-ReconfRgstFDD,
id-MICH-Parameters-CTCH-ReconfRqstTDD,
id-MICH-Parameters-CTCH-SetupRqstFDD,
id-MICH-Parameters-CTCH-SetupRqstTDD,
id-MIMO-Capability,
id-MIMO-PilotConfiguration,
id-Modification-Period,
id-multipleRL-dl-DPCH-InformationList,
id-multipleRL-dl-DPCH-InformationModifyList,
id-multipleRL-dl-CCTrCH-InformationModifyList-RL-ReconfRgstTDD,
id-multiple-RL-Information-RL-ReconfPrepTDD,
id-multiple-RL-Information-RL-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-Paging-MACFlows-to-DeleteFDD,
id-P-CCPCH-Information,
id-P-CPICH-Information.
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRgstTDD,
id-PCCPCH-Information-Cell-SetupRgstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp.
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRgstTDD,
id-PCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRgstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
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id-PDSCH-RL-ID.
id-PDSCH-Timeslot-Format-PSCH-ReconfRast-LCR.
id-PDSCHSets-AddList-PSCH-ReconfRast.
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information.
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRgstTDD,
id-PLCCH-Information-AuditRsp,
id-PLCCH-Information-ResourceStatusInd,
id-PLCCH-Information-RL-ReconfPrepTDDLCR,
id-PLCCH-InformationList-AuditRsp,
id-PLCCH-InformationList-ResourceStatusInd.
id-PLCCH-Parameters-CTCH-ReconfRostTDD.
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-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRgstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRgstFDD,
id-Primary-CPICH-Usage-for-Channel-Estimation,
id-PrimarySCH-Information-Cell-ReconfRgstFDD.
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRgstTDD,
id-SCH-Information-Cell-SetupRgstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Timeslot-Format-PSCH-ReconfRqst-LCR,
id-PUSCHConstant.
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRast,
id-PUSCHSets-ModifyList-PSCH-ReconfRast,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRgstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
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id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator.
id-RL-ID.
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rgst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRgstFDD,
id-RL-informationItem-RL-DeletionRgst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd.
id-RL-InformationItem-RL-SetupRostFDD.
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-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD.
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-RL-Specific-E-DCH-Info,
id-S-CCPCH-Information,
id-S-CCPCH-InformationListExt-AuditRsp,
id-S-CCPCH-InformationListExt-ResourceStatusInd,
id-S-CCPCH-LCR-InformationListExt-AuditRsp.
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd.
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information.
id-Secondary-CCPCHListIE-CTCH-ReconfRgstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-Secondary-CPICH-Information,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
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id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD.
id-SecondaryCPICH-InformationList-Cell-SetupRostFDD.
id-Secondary-CPICH-Information-Change,
id-SecondarySCH-Information-Cell-ReconfRgstFDD,
id-SecondarySCH-Information-Cell-SetupRgstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-Serving-Cell-Change-CFN,
id-Serving-E-DCH-RL-ID,
id-SixteenOAM-UL-Capability,
id-SixtyfourQAM-DL-Capability,
id-SixtyfourQAM-DL-MIMO-Combined-Capability,
id-SFN.
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerReguestIndicator,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-E-DPCCH-Power-Boosting-Capability,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRgstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRgstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TnlOos,
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-Tstd-indicator,
id-UARFCNforNt,
id-UARFCNforNd.
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD.
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD.
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRgstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
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id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRostTDD.
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-SvncAdjustmntFailureTDD.
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-SetupRqstTDD,
id-DwPCH-LCR-Information
id-DwPCH-LCR-InformationList-AuditRsp.
id-DwPCH-LCR-Information-Cell-SetupRgstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRgstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRgstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
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-SetupRgstTDD,
id-PCH-Power-LCR-CTCH-ReconfRgstTDD,
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-ReconfRgstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRgstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRastTDD,
id-TimeSlotLCR-CM-Rqst,
id-UL-DPCH-LCR-Information-RL-SetupRgstTDD,
id-DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD,
id-UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRgstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
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id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RastTDD.
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-ReconfRast,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRgst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRast.
id-PUSCH-Info-DM-Rgst,
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-E-AGCH-E-RGCH-E-HICH-MaxPower-PSCH-ReconfRqst,
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRgst,
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRgst,
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRgstTDD,
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRgstTDD,
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD,
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRgstTDD,
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRastTDD.
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
id-NSubCyclesPerCyclePeriod-CellSyncReconfRastTDD.
id-DwPCH-Power,
id-AccumulatedClockupdate-CellSvncReprtTDD,
id-HSDPA-Capability,
id-HSDSCH-FDD-Information,
id-HSDSCH-Common-System-InformationFDD,
id-HSDSCH-Common-System-Information-ResponseFDD,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-Information-to-Modify-Unsynchronised,
id-HSDSCH-MACdFlows-to-Add,
id-HSDSCH-MACdFlows-to-Delete.
id-HSDSCH-Paging-System-InformationFDD.
id-HSDSCH-Paging-System-Information-ResponseFDD,
id-HSDSCH-RearrangeList-Bearer-RearrangeInd,
id-HSDSCH-Resources-Information-AuditRsp,
id-HSDSCH-Resources-Information-ResourceStatusInd,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
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id-HSPDSCH-RL-ID.
id-HSSICH-Info-DM-Rort.
id-HSSICH-Info-DM-Rast.
id-HSSICH-Info-DM-Rsp,
id-PrimCCPCH-RSCP-DL-PC-RastTDD.
id-HSDSCH-FDD-Update-Information,
id-HSDSCH-TDD-Update-Information,
id-UL-Synchronisation-Parameters-LCR,
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD,
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD.
id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD,
id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD,
id-CCTrCH-Maximum-DL-Power-RL-AdditionRgstTDD.
id-CCTrCH-Minimum-DL-Power-RL-AdditionRastTDD.
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-SetupRastTDD,
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,
id-Maximum-Target-ReceivedTotalWideBandPower,
id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp.
id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp.
id-SynchronisationIndicator,
id-Reference-ReceivedTotalWideBandPower,
id-Reference-ReceivedTotalWideBandPowerReporting,
id-Reference-ReceivedTotalWideBandPowerSupportIndicator,
id-Maximum-Target-ReceivedTotalWideBandPower-LCR,
id-multiple-PUSCH-InfoList-DM-Rsp,
id-multiple-PUSCH-InfoList-DM-Rprt,
id-Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio,
id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp.
id-PCCPCH-768-Information-Cell-SetupRgstTDD,
id-SCH-768-Information-Cell-SetupRgstTDD,
id-SCH-768-Information-Cell-ReconfRqstTDD,
id-PCCPCH-768-Information-Cell-ReconfRgstTDD,
id-P-CCPCH-768-Information-AuditRsp,
id-PICH-768-Information-AuditRsp,
id-PRACH-768-InformationList-AuditRsp,
id-SCH-768-Information-AuditRsp,
id-MICH-768-Information-AuditRsp,
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id-CommonPhysicalChannelID768-CommonTrChDeletionReg,
id-MICH-768-Parameters-CTCH-ReconfRgstTDD.
id-PICH-768-Parameters-CTCH-SetupRostTDD.
id-PICH-768-Parameters-CTCH-ReconfRgstTDD,
id-PRACH-768-Parameters-CTCH-SetupRgstTDD,
id-S-CCPCH-768-InformationList-AuditRsp,
id-S-CCPCH-768-Information-AuditRsp.
id-S-CCPCH-768-Parameters-CTCH-SetupRgstTDD,
id-S-CCPCH-768-Parameters-CTCH-ReconfRgstTDD,
id-S-CCPCH-768-Information-ResourceStatusInd.
id-P-CCPCH-768-Information-ResourceStatusInd,
id-PICH-768-Information-ResourceStatusInd.
id-PRACH-768-InformationList-ResourceStatusInd.
id-SCH-768-Information-ResourceStatusInd.
id-MICH-768-Information-ResourceStatusInd.
id-S-CCPCH-768-InformationList-ResourceStatusInd.
id-PRACH-768-Information,
id-UL-DPCH-768-Information-RL-SetupRgstTDD,
id-DL-DPCH-768-Information-RL-SetupRgstTDD,
id-DL-DPCH-InformationItem-768-RL-AdditionRgstTDD,
id-UL-DPCH-InformationItem-768-RL-AdditionRgstTDD,
id-UL-DPCH-768-InformationAddItemIE-RL-ReconfPrepTDD,
id-UL-DPCH-768-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-768-InformationModify-AddItem,
id-UL-DPCH-768-InformationModify-AddList,
id-UL-Timeslot768-Information-RL-ReconfPrepTDD,
id-DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD,
id-DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD,
id-DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-DPCH-ID768-DM-Rast,
id-multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp.
id-DPCH-ID768-DM-Rsp,
id-DPCH-ID768-DM-Rprt,
id-PDSCH-AddInformation-768-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-768-PSCH-ReconfRqst,
id-PUSCH-AddInformation-768-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-768-PSCH-ReconfRqst,
id-dL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRqst,
id-hS-SCCH-Information-768-PSCH-ReconfRgst,
id-hS-SCCH-InformationModify-768-PSCH-ReconfRqst,
id-tFCI-Presence,
id-E-RUCCH-InformationList-AuditRsp,
id-E-RUCCH-InformationList-ResourceStatusInd,
id-E-RUCCH-Information,
id-E-DCH-Information,
id-E-DCH-Information-Response,
id-E-DCH-Information-Reconfig,
id-E-PUCH-Information-PSCH-ReconfRgst,
id-Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRgst,
id-Modify-E-AGCH-Resource-Pool-PSCH-ReconfRgst,
id-Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRqst,
id-E-HICH-Information-PSCH-ReconfRqst,
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id-E-DCH-TDD-CapacityConsumptionLaw,
id-E-HICH-TimeOffset.
id-Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells.
id-E-DCH-Serving-RL-ID.
id-E-RUCCH-768-InformationList-AuditRsp,
id-E-RUCCH-768-InformationList-ResourceStatusInd,
id-E-RUCCH-768-Information,
id-E-DCH-768-Information,
id-E-DCH-768-Information-Reconfig,
id-E-PUCH-Information-768-PSCH-ReconfRqst,
id-Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst,
id-Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst,
id-E-HICH-Information-768-PSCH-ReconfRgst,
id-RTWP-ReportingIndicator,
id-RTWP-CellPortion-ReportingIndicator,
id-Received-Scheduled-EDCH-Power-Share-Value,
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value,
id-Received-Scheduled-EDCH-Power-Share,
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion,
id-ueCapability-Info,
id-MAChs-ResetIndicator,
id-SYNC-UL-Partition-LCR,
id-E-DCH-LCR-Information,
id-E-DCH-LCR-Information-Reconfig.
id-E-PUCH-Information-LCR-PSCH-ReconfRqst,
id-Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRgst,
id-Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRgst,
id-E-HICH-TimeOffsetLCR,
id-HSDSCH-MACdPDU-SizeCapability,
id-ModulationPO-MBSFN,
id-Secondary-CCPCH-SlotFormat-Extended,
id-MBSFN-Only-Mode-Indicator-Cell-SetupRgstTDD-LCR,
id-Time-Slot-Parameter-ID.
id-MBSFN-Only-Mode-Capability,
id-MBSFN-Cell-ParameterID-Cell-SetupRqstTDD,
id-MBSFN-Cell-ParameterID-Cell-ReconfRgstTDD,
id-S-CCPCH-Modulation,
id-TimeSlotConfigurationList-LCR-CTCH-SetupRqstTDD,
id-Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp,
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp,
id-Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD,
id-UARFCN-Adjustment,
id-Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd,
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd.
id-UPPCHPositionLCR,
id-UPPCH-LCR-Parameters-CTCH-ReconfRgstTDD,
id-UPPCH-LCR-InformationList-AuditRsp,
id-UPPCH-LCR-InformationItem-AuditRsp,
id-UPPCH-LCR-InformationList-ResourceStatusInd,
id-UPPCH-LCR-InformationItem-ResourceStatusInd,
id-multipleFreq-dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst,
```

```
id-multipleFreq-HS-DSCH-Resources-InformationList-AuditRsp,
id-multipleFreq-HS-DSCH-Resources-InformationList-ResourceStatusInd.
id-UARFCNSpecificCauseList.id-Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD.
id-MultipleFreg-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRgst,
id-Extended-HS-SCCH-ID.
id-Extended-HS-SICH-ID,
id-HSSICH-InfoExt-DM-Rast,
id-Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRast,
id-HS-SCCH-InformationExt-LCR-PSCH-ReconfRqst,
id-HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRqst,
id-PowerControlGAP,
id-MBSFN-SpecialTimeSlot-LCR,
id-MultipleFreg-E-DCH-Resources-InformationList-AuditRsp,
id-MultipleFreq-E-DCH-Resources-InformationList-ResourceStatusInd,
id-MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst,
id-MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst,
id-Extended-E-HICH-ID-TDD,
id-E-DCH-MACdPDU-SizeCapability,
id-E-HICH-TimeOffset-Extension,
id-MultipleFreg-E-HICH-TimeOffsetLCR,
id-PLCCH-parameters.
id-E-RUCCH-parameters,
id-E-RUCCH-768-parameters,
id-HS-Cause,
id-E-Cause,
id-AdditionalTimeSlotListLCR.
id-AdditionalMeasurementValueList,
id-HSDSCH-Paging-System-InformationLCR,
id-HSDSCH-Paging-System-Information-ResponseLCR,
id-HSDSCH-Common-System-InformationLCR,
id-HSDSCH-Common-System-Information-ResponseLCR,
id-Paging-MACFlows-to-DeleteLCR,
id-Enhanced-UE-DRX-CapabilityLCR,
id-Enhanced-UE-DRX-InformationLCR,
id-Common-EDCH-MACdFlows-to-DeleteLCR,
id-Common-EDCH-System-InformationLCR,
id-Common-EDCH-System-Information-ResponseLCR,
id-Common-MACFlows-to-DeleteLCR,
id-Common-UL-MACFlows-to-DeleteLCR,
id-HSDSCH-PreconfigurationSetup,
id-HSDSCH-PreconfigurationInfo,
id-NoOfTargetCellHS-SCCH-Order,
id-EnhancedHSServingCC-Abort,
id-GANSS-Time-ID,
id-Additional-HS-Cell-Information-RL-Setup,
id-Additional-HS-Cell-Information-Response,
id-Additional-HS-Cell-Information-RL-Addition,
id-Additional-HS-Cell-Change-Information-Response,
id-Additional-HS-Cell-Information-RL-Reconf-Prep,
id-Additional-HS-Cell-Information-RL-Reconf-Reg,
id-Additional-HS-Cell-Information-RL-Param-Upd,
id-Multi-Cell-Capability-Info,
id-MinimumReducedE-DPDCH-GainFactor,
id-IMB-Parameters.
```

```
id-E-RNTI,
maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfDCHs.
maxNrOfDLTSs.
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDPCHsPerRL-1,
maxNrOfDPCHLCRs,
maxNrOfDPCHsLCRPerRL-1,
maxNrOfDPCHs768,
maxNrOfDPCHs768PerRL-1,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPUSCHs-1,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHsinExt,
maxNrOfSCCPCHLCRs,
maxNrOfSCCPCHsLCRinExt,
maxNrOfSCCPCHs768,
maxNrOfULTSs,
maxNrOfULTSLCRs.
maxNrOfUSCHs,
maxFACHCell,
maxFPACHCell,
maxRACHCell,
maxPLCCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCCPCHCell768,
maxSCCPCHCellinExt,
maxSCCPCHCellinExtLCR.
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxIB,
maxIBSEG,
maxNrOfCellPortionsPerCell,
```

```
maxNrOfHSSCCHs,
          maxNrOfHSSICHs.
          maxNrOfHSSICHs-1,
          maxNrOfHSPDSCHs,
          maxNrOfHSPDSCHs768
          maxNrOfSyncFramesLCR,
          maxNrOfReceptionsperSyncFrameLCR,
          maxNrOfSyncDLCodesLCR,
          maxNrOfMACdFlows.
          maxNrOfEDCHMACdFlows,
          maxE-RUCCHCell,
          maxNrOfE-PUCHSlots,
          maxNrOfEAGCHs.
          maxNrOfEAGCHCodes,
          maxNrOfE-PUCHSlotsLCR,
          maxNrOfEPUCHcodes,
          maxNrOfEHICHs,
          maxFrequencyinCell,
          maxFrequencyinCell-1,
          maxNrOfHSSCCHsinExt,
          maxNrOfHSSCCHsLCR,
          maxNrOfEAGCHsLCR,
          maxNrOfEHICHsLCR,
          maxNrOfHSDSCH-1
FROM NBAP-Constants:
-- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
CommonTransportChannelSetupRequestFDD ::= SEQUENCE
         protocolIEs
                                                                    ProtocolIE-Container
                                                                                                                                           {{CommonTransportChannelSetupRequestFDD-IEs}},
                                                                                                                                          {{CommonTransportChannelSetupRequestFDD-Extensions}}
         protocolExtensions
                                                                     ProtocolExtensionContainer
                                                                                                                                                                                                                                                                                       OPTIONAL,
{\tt CommonTransportChannelSetupRequestFDD-Extensions~NBAP-PROTOCOL-EXTENSION~::=~ \{ to the least of the leas
CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
                            id-C-ID
                                                                                                                                                                                                                         TYPE
              ID
                                                                                                                                                              CRITICALITY reject
                                                                                                                                                                                                                                             C-ID
                                                                                                                                                                                                                                                                                                                    PRESENCE mandatory
                            id-ConfigurationGenerationID
                                                                                                                                                              CRITICALITY reject
                                                                                                                                                                                                                         TYPE
                                                                                                                                                                                                                                             ConfigurationGenerationID
                                                                                                                                                                                                                                                                                                                  PRESENCE mandatory
              ID
                            id-CommonPhysicalChannelType-CTCH-SetupRqstFDD
                                                                                                                                                              CRITICALITY ignore
                                                                                                                                                                                                                         TYPE
                                                                                                                                                                                                                                             CommonPhysicalChannelType-CTCH-SetupRqstFDD
          PRESENCE
                                       mandatory },
CommonPhysicalChannelType-CTCH-SetupRqstFDD ::= CHOICE {
          secondary-CCPCH-parameters
                                                                                        Secondary-CCPCH-CTCH-SetupRqstFDD,
                                                                                         PRACH-CTCH-SetupRqstFDD,
          pRACH-parameters
```

```
notUsed-pCPCHes-parameters
                                    NULL.
Secondary-CCPCH-CTCH-SetupRgstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    fdd-S-CCPCH-Offset
                                            FDD-S-CCPCH-Offset,
    dl-ScramblingCode
                                            DL-ScramblingCode
                                                                                        OPTIONAL,
    -- This IE shall be present if the PCH Parameters IE is not present
    fdd-DL-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber,
    tFCS
    secondary-CCPCH-SlotFormat
                                            SecondaryCCPCH-SlotFormat,
    t.FCI-Presence
                                            TFCI-Presence
                                                                                        OPTIONAL.
    -- This IE shall be present if the Secondary CCPCH Slot Format is set to any of the values from 8 to 17 or if 3.84Mcps TDD IMB is used
    multiplexingPosition
                                            MultiplexingPosition,
    powerOffsetInformation
                                            PowerOffsetInformation-CTCH-SetupRgstFDD,
    sTTD-Indicator
                                            STTD-Indicator,
    fACH-Parameters
                                            FACH-ParametersList-CTCH-SetupRqstFDD
                                                                                        OPTIONAL,
                                            PCH-Parameters-CTCH-SetupRgstFDD
    pCH-Parameters
                                                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                OPTIONAL,
Secondary-CCPCHItem-CTCH-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-MICH-Parameters-CTCH-SetupRqstFDD
                                                                                                                             PRESENCE optional }
                                                        CRITICALITY reject EXTENSION MICH-Parameters-CTCH-SetupRqstFDD
     ID id-FDD-S-CCPCH-FrameOffset-CTCH-SetupRqstFDD
                                                        CRITICALITY reject EXTENSION FDD-S-CCPCH-FrameOffset
                                                                                                                             PRESENCE optional
     ID id-ModulationPO-MBSFN
                                                        CRITICALITY reject EXTENSION ModulationPO-MBSFN
                                                                                                                             PRESENCE optional
     ID id-Secondary-CCPCH-SlotFormat-Extended
                                                        CRITICALITY reject EXTENSION Secondary-CCPCH-SlotFormat-Extended
                                                                                                                             PRESENCE optional
     ID id-IMB-Parameters
                                                        CRITICALITY reject EXTENSION IMB-Parameters
                                                                                                                             PRESENCE optional },
PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
    pO1-ForTFCI-Bits
                                            PowerOffset,
    pO3-ForPilotBits
                                            PowerOffset,
   iE-Extensions
                                            ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
PowerOffsetInformation-CTCH-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstFDD }}
FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
     ID id-FACH-ParametersListIE-CTCH-SetupRqstFDD CRITICALITY reject
                                                                          TYPE FACH-ParametersListIE-CTCH-SetupRqstFDD PRESENCE mandatory
FACH-ParametersListIE-CTCH-SetupRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRgstFDD
FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                        CommonTransportChannelID,
    transportFormatSet
                                        TransportFormatSet,
```

```
toAWS
                                     ToAWS,
    toAWE
                                     TOAWE.
    maxFACH-Power
                                     DL-Power.
   iE-Extensions
                                     ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRgstFDD-ExtIEs} }
                                                                                                                     OPTIONAL,
FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-bindingID
                                             CRITICALITY ignore
                                                                    EXTENSION
                                                                               BindingID
                                                                                                                PRESENCE optional }
     TD
          id-transportlayeraddress
                                             CRITICALITY ignore
                                                                               TransportLayerAddress
                                                                                                                PRESENCE optional
                                                                    EXTENSION
     TD
          id-TnlOos
                                             CRITICALITY ignore
                                                                    EXTENSION
                                                                               Tnl0os
                                                                                                                PRESENCE optional }
          id-BroadcastReference
                                             CRITICALITY ignore
                                                                               BroadcastReference
                                                                                                                PRESENCE optional }
     TD
                                                                    EXTENSION
                                                                                                                PRESENCE optional },
     ID
          id-IPMulticastIndication
                                             CRITICALITY ignore
                                                                    EXTENSION
                                                                               IPMulticastIndication
PCH-Parameters-CTCH-SetupRgstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRgstFDD }}
PCH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    PCH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
                                     CommonTransportChannelID,
    commonTransportChannelID
   transportFormatSet
                                     TransportFormatSet,
    toAWS
                                     ToAWS,
                                     TOAWE,
    toAWE
   pCH-Power
                                     DL-Power,
                                     PICH-Parameters-CTCH-SetupRqstFDD,
   pICH-Parameters
                                     ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
           id-bindingID
                                                                                                              PRESENCE optional } |
                                             CRITICALITY ignore
                                                                    EXTENSION
                                                                               BindingID
          id-transportlayeraddress
                                             CRITICALITY ignore
                                                                                                             PRESENCE optional }
     TD
                                                                    EXTENSION
                                                                               TransportLayerAddress
     ID
          id-TnlOos
                                             CRITICALITY ignore
                                                                    EXTENSION
                                                                               Tnl0os
                                                                                                              PRESENCE optional },
    . . .
PICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                             CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber
                                             FDD-DL-ChannelisationCodeNumber,
   pICH-Power
                                             PICH-Power,
   pICH-Mode
                                             PICH-Mode,
   sTTD-Indicator
                                             STTD-Indicator.
   iE-Extensions
                                             ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRgstFDD-ExtIEs} }
                                                                                                                        OPTIONAL,
PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
MICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   fdd-dl-ChannelisationCodeNumber
                                         FDD-DL-ChannelisationCodeNumber.
                                         PICH-Power.
   mICH-Power
   mICH-Mode
                                         MICH-Mode,
   sTTD-Indicator
                                         STTD-Indicator,
                                         ProtocolExtensionContainer { { MICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                             OPTIONAL,
MICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-CTCH-SetupRgstFDD ::= SEQUENCE
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   scramblingCodeNumber
                                         ScramblingCodeNumber,
                                         TFCS,
   tFCS
                                         PreambleSignatures,
   preambleSignatures
   allowedSlotFormatInformation
                                         AllowedSlotFormatInformationList-CTCH-SetupRgstFDD,
   rACH-SubChannelNumbers
                                         RACH-SubChannelNumbers.
   ul-punctureLimit
                                         PunctureLimit,
                                         PreambleThreshold,
   preambleThreshold
   rACH-Parameters
                                         RACH-Parameters-CTCH-SetupRqstFDD,
   aICH-Parameters
                                         AICH-Parameters-CTCH-SetupRqstFDD,
                                         OPTIONAL,
   iE-Extensions
   . . .
PRACHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
SetupRqstFDD
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   rACHSlotFormat
                                         RACH-SlotFormat,
   iE-Extensions
                                         OPTIONAL,
   . . .
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ RACH-ParametersIE-CTCH-SetupRqstFDD }}
RACH-ParametersIE-CTCH-SetupRgstFDD NBAP-PROTOCOL-IES ::= {
   RACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE
```

```
CommonTransportChannelID,
   commonTransportChannelID
   transportFormatSet
                                            TransportFormatSet,
   iE-Extensions
                                            ProtocolExtensionContainer { RACH-ParametersItem-CTCH-SetupRgstFDD-ExtIEs} }
RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-bindingID
                                            CRITICALITY ignore
                                                                   EXTENSION
                                                                              BindingID
                                                                                                            PRESENCE optional }
     ID
          id-transportlayeraddress
                                            CRITICALITY ignore
                                                                   EXTENSION
                                                                              TransportLayerAddress
                                                                                                            PRESENCE optional } |
                                            CRITICALITY ignore
                                                                                                            PRESENCE optional },
     ID
          id-TnlOos
                                                                   EXTENSION
                                                                              Tnl0os
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,
                                            ProtocolExtensionContainer { { AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                      OPTIONAL,
AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
__ *******************************
CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                     {{CommonTransportChannelSetupRequestTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}}
                                                                                                              OPTIONAL,
CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-C-ID
                                                        CRITICALITY reject TYPE C-ID
                                                                                                                 PRESENCE mandatory
     ID
          id-ConfigurationGenerationID
                                                        CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                 PRESENCE mandatory
          ID
                                                                                                                            PRESENCE
   mandatory },
   . . .
CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
   secondary-CCPCH-parameters
                                            Secondary-CCPCH-CTCH-SetupRqstTDD,
   pRACH-parameters
                                            PRACH-CTCH-SetupRqstTDD,
```

```
extension-CommonPhysicalChannelType-CTCH-SetupRgstTDD Extension-CommonPhysicalChannelType-CTCH-SetupRgstTDD
Extension-CommonPhysicalChannelType-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ Extension-CommonPhysicalChannelType-CTCH-SetupRgstTDDIE }}
Extension-CommonPhysicalChannelType-CTCH-SetupRqstTDDIE NBAP-PROTOCOL-IES ::= {
    ID id-PLCCH-parameters
                                  CRITICALITY ignore TYPE PLCCH-parameters
                                                                                   PRESENCE mandatory } |
    ID id-E-RUCCH-parameters
                                   CRITICALITY ignore
                                                           TYPE E-RUCCH-parameters
                                                                                       PRESENCE mandatory } |
    ID id-E-RUCCH-768-parameters CRITICALITY ignore
                                                           TYPE E-RUCCH-768-parameters PRESENCE mandatory },
Secondary-CCPCH-CTCH-SetupRgstTDD ::= SEQUENCE {
    sCCPCH-CCTrCH-ID
                                               CCTrCH-ID, -- For DL CCTrCH supporting one or several Secondary CCPCHs
    t FCS
                                                           -- For DL CCTrCH supporting one or several Secondary CCPCHs
    tFCI-Coding
                                               TFCI-Coding,
    punctureLimit
                                               PunctureLimit,
    secondaryCCPCH-parameterList
                                               Secondary-CCPCH-parameterList-CTCH-SetupRgstTDD,
                                               FACH-ParametersList-CTCH-SetupRgstTDD
                                                                                           OPTIONAL,
    fACH-ParametersList
    pCH-Parameters
                                               PCH-Parameters-CTCH-SetupRqstTDD
                                                                                           OPTIONAL,
                                               ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}}
    iE-Extensions
Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-Tstd-indicator
                                                               CRITICALITY reject EXTENSION TSTD-Indicator
                                                                                                                           PRESENCE optional } |
     ID id-MICH-Parameters-CTCH-SetupRgstTDD
                                                               CRITICALITY reject EXTENSION MICH-Parameters-CTCH-SetupRgstTDD PRESENCE optional
     ID id-Additional-S-CCPCH-Parameters-CTCH-SetupRgstTDD
                                                               CRITICALITY reject EXTENSION Secondary-CCPCH-parameterExtendedList-CTCH-
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-
SetupRastTDD
                   PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHLCRs SCCPCHs are to be established.
    { ID id-S-CCPCH-768-Parameters-CTCH-SetupRgstTDD
                                                               CRITICALITY reject EXTENSION Secondary-CCPCH-768-parameterList-CTCH-SetupRqstTDD
       PRESENCE optional }|
     ID id-S-CCPCH-Modulation
                                                               CRITICALITY reject EXTENSION ModulationMBSFN
                                                                                                                                 PRESENCE optional
    -- Applicable to 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    ID id-TimeSlotConfigurationList-LCR-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-CTCH-SetupRqstTDD
    PRESENCE optional } |
    { ID id-UARFCNforNt
                           CRITICALITY reject EXTENSION UARFON
                                                                       PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency of Secondary Frequency on which SCCPCH to be set
up
    . . .
Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}
Secondary-CCPCH-parameterListIEs-CTCH-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
     ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD
    PRESENCE optional } |
    { ID id-Secondary-CCPCH-LCR-parameterList-CTCH-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-SetupRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    timeslot
                                                TimeSlot,
    midambleShiftandBurstType
                                                MidambleShiftAndBurstType,
    tdd-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    s-CCPCH-Power
                                                DL-Power.
    iE-Extensions
                                                ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRgstTDD-ExtIEs} }
    OPTIONAL,
Secondary-CCPCH-parameterItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-tFCI-Presence
                                                CRITICALITY notify EXTENSION TFCI-Presence
                                                                                                 PRESENCE optional },
    . . .
Secondary-CCPCH-LCR-parameterList-CTCH-SetupRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-
SetupRqstTDD
Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRgstTDD ::= SEQUENCE
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                                TDD-ChannelisationCodeLCR,
    timeslotLCR
                                                TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, NodeB shall ignore the contents of this IE.
    tdd-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    s-CCPCH-Power
                                                DL-Power,
    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 ::= {
    { ID id-MBSFN-SpecialTimeSlot-LCR
                                                    CRITICALITY ignore
                                                                            EXTENSION TimeslotLCR-Extension
                                                                                                                          PRESENCE optional },
    -- Only for 1.28 Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The IE 'Time Slot LCR' shall be ignored if this
IE appears
    . . .
Secondary-CCPCH-768-parameterList-CTCH-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs768)) OF Secondary-CCPCH-768-parameterItem-CTCH-
SetupRastTDD
Secondary-CCPCH-768-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE
    commonPhysicalChannelID768
                                                CommonPhysicalChannelID768,
```

```
tdd-ChannelisationCode768
                                         TDD-ChannelisationCode768,
   timeslot
                                         TimeSlot.
   tFCI-Presence768
                                         TFCI-Presence
                                                          OPTIONAL.
   midambleShiftandBurstType768
                                         MidambleShiftAndBurstType768,
   tdd-PhysicalChannelOffset
                                         TDD-PhysicalChannelOffset,
   repetitionPeriod
                                         RepetitionPeriod,
                                         RepetitionLength,
   repetitionLength
   s-CCPCH-Power
                                         DL-Power,
   iE-Extensions
                                         ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-768-CTCH-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
Secondary-CCPCH-parameterItem-768-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRgstTDD }}
FACH-ParametersListIEs-CTCH-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
   FACH-ParametersListIE-CTCH-SetupRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRgstTDD
FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonTransportChannelID
                                     CommonTransportChannelID,
   fACH-CCTrCH-ID
                                     CCTrCH-ID,
   dl-TransportFormatSet
                                     TransportFormatSet,
   toAWS
                                     ToAWS,
   t.oAWE
                                     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
   { ID id-bindingID
                                             CRITICALITY ignore EXTENSION BindingID
                                                                                                    PRESENCE optional } |
   -- Shall be ignored if bearer establishment with ALCAP.
         id-transportlayeraddress
                                                                                                   PRESENCE optional } |
   { ID
                                            CRITICALITY ignore EXTENSION TransportLayerAddress
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID
         id-TnlOos
                                                                       Tnl0os
                                                                                                   PRESENCE optional } |
                                            CRITICALITY ignore EXTENSION
   -- Shall be ignored if bearer establishment with ALCAP.
    ID
         id-BroadcastReference
                                            CRITICALITY ignore EXTENSION
                                                                        BroadcastReference
                                                                                                    PRESENCE optional } |
         id-IPMulticastIndication
                                                                                                    PRESENCE optional }.
    TD
                                            CRITICALITY ignore EXTENSION IPMulticastIndication
   . . .
PCH-Parameters-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRgstTDD }}
PCH-ParametersIE-CTCH-SetupRqstTDD 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-SetupRqstTDD,
   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-transportlayeraddress
                                                 CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                                                   PRESENCE optional
   -- Shall be ignored if bearer establishment with ALCAP.
     ID id-PICH-768-Parameters-CTCH-SetupRgstTDD
                                                 CRITICALITY reject EXTENSION PICH-768-ParametersItem-CTCH-SetupRqstTDD
                                                                                                                   PRESENCE optional
     ID id-TnlOos
                                                 CRITICALITY ignore EXTENSION ThlOos
                                                                                                                   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,
   iE-Extensions
                                      ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
                                                                                                                OPTIONAL,
PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE
    commonPhysicalChannelID
                                           CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR.
    timeSlotLCR
                                           TimeSlotLCR.
    midambleShiftLCR
                                           MidambleShiftLCR.
                                           TDD-PhysicalChannelOffset,
    tdd-PhysicalChannelOffset
                                           RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                           RepetitionLength,
    pagingIndicatorLength
                                           PagingIndicatorLength,
                                           PICH-Power,
    pICH-Power
    second-TDD-ChannelisationCodeLCR
                                           TDD-ChannelisationCodeLCR,
                                           ProtocolExtensionContainer { { PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
    iE-Extensions
PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         id-Tstd-indicator
                                       CRITICALITY reject
                                                                                                                  optional },
                                                               EXTENSION TSTD-Indicator
                                                                                               PRESENCE
    -- Applicable to 1.28 Mcps TDD only
PICH-768-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                           CommonPhysicalChannelID768,
    tdd-ChannelisationCode768
                                           TDD-ChannelisationCode768,
    timeSlot
                                           TimeSlot,
    midambleshiftAndBurstType78
                                           MidambleShiftAndBurstType768,
    tdd-PhysicalChannelOffset
                                           TDD-PhysicalChannelOffset,
    repetitionPeriod
                                           RepetitionPeriod,
    repetitionLength
                                           RepetitionLength,
                                           PagingIndicatorLength,
    pagingIndicatorLength
    pICH-Power
                                           PICH-Power,
    iE-Extensions
                                           ProtocolExtensionContainer
                                                                      OPTIONAL,
    . . .
PICH-768-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-Parameters-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                           CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset
                                           TDD-PhysicalChannelOffset,
    repetitionPeriod
                                           RepetitionPeriod,
    repetitionLength
                                           RepetitionLength,
    notificationIndicatorLength
                                           NotificationIndicatorLength,
    mICH-Power
                                           PICH-Power,
    mICH-TDDOption-Specific-Parameters
                                           MICH-TDDOption-Specific-Parameters-CTCH-SetupRqstTDD,
                                           ProtocolExtensionContainer { { MICH-Parameters-CTCH-SetupRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                           OPTIONAL,
    . . .
MICH-Parameters-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
MICH-TDDOption-Specific-Parameters-CTCH-SetupRgstTDD ::= CHOICE {
   hCR-TDD
                                          MICH-HCR-Parameters-CTCH-SetupRgstTDD,
   1CR-TDD
                                          MICH-LCR-Parameters-CTCH-SetupRgstTDD,
    . . . ,
    cHipRate768-TDD
                                          MICH-768-Parameters-CTCH-SetupRqstTDD
MICH-HCR-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE {
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   timeSlot
                                          TimeSlot,
   midambleshiftAndBurstType
                                          MidambleShiftAndBurstType,
   iE-Extensions
                                          ProtocolExtensionContainer { { MICH-HCR-Parameters-CTCH-SetupRgstTDD-ExtIEs } }
                                                                                                                           OPTIONAL.
MICH-HCR-Parameters-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-LCR-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE {
                                          TDD-ChannelisationCodeLCR,
   tdd-ChannelisationCodeLCR
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, NodeB shall ignore the contents of this IE.
    second-TDD-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
    tSTD-Indicator
                                          TSTD-Indicator,
   iE-Extensions
                                          ProtocolExtensionContainer { { MICH-LCR-Parameters-CTCH-SetupRgstTDD-ExtIEs } }
                                                                                                                           OPTIONAL,
MICH-LCR-Parameters-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         id-MBSFN-SpecialTimeSlot-LCR
                                                  CRITICALITY ignore
                                                                         EXTENSION TimeslotLCR-Extension
                                                                                                                     PRESENCE optional },
    -- Only for 1.28 Mcps TDD MBSFN only mode, this IE indicates the MBSFN Special Time Slot [19]. The IE 'Time Slot LCR' shall be ignored if this
IE appears
MICH-768-Parameters-CTCH-SetupRgstTDD ::= SEQUENCE
    tdd-ChannelisationCode768
                                          TDD-ChannelisationCode768,
   timeSlot
                                          TimeSlot,
   midambleshiftAndBurstType768
                                          MidambleShiftAndBurstType768,
                                          iE-Extensions
                                                                                                                           OPTIONAL,
    . . .
MICH-768-Parameters-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-LCR-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-CTCH-SetupRqstTDD
TimeSlotConfigurationItem-LCR-CTCH-SetupRqstTDD ::= SEQUENCE {
```

```
timeslotLCR
                                         TimeSlotLCR.
   timeslotLCR-Parameter-ID
                                         CellParameterID.
   iE-Extensions
                                         ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-CTCH-SetupRgstTDD-ExtIEs} }
TimeSlotConfigurationItem-LCR-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-parameterExtendedList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsinExt)) OF Secondary-CCPCH-parameterItem-CTCH-
SetupRqstTDD
   -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be established.
Secondary-CCPCH-LCR-parameterExtendedList-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsLCRinExt)) OF Secondary-CCPCH-LCR-parameterItem-
CTCH-SetupRqstTDD
   -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHLCRs SCCPCHs are to be established.
PRACH-CTCH-SetupRgstTDD ::= SEQUENCE {
   pRACH-Parameters-CTCH-SetupRgstTDD
                                             PRACH-Parameters-CTCH-SetupRgstTDD,
   iE-Extensions
                                             OPTIONAL,
PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-SetupRqstTDD PRESENCE optional }
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
   { ID id-PRACH-768-Parameters-CTCH-SetupRgstTDD CRITICALITY reject EXTENSION PRACH-768-ParametersItem-CTCH-SetupRgstTDD PRESENCE optional },
   . . .
PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}
PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
                                                  CRITICALITY reject TYPE PRACH-ParametersItem-CTCH-SetupRgstTDD
     ID id-PRACH-ParametersItem-CTCH-SetupRgstTDD
                                                                                                                     PRESENCE optional } |
     ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD CRITICALITY reject TYPE PRACH-LCR-ParametersList-CTCH-SetupRqstTDD PRESENCE optional
PRACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE
   commonPhysicalChannelID
                                             CommonPhysicalChannelID,
   t.FCS
                                             TFCS,
   timeslot
                                             TimeSlot,
   tdd-ChannelisationCode
                                             TDD-ChannelisationCode,
   maxPRACH-MidambleShifts
                                             MaxPRACH-MidambleShifts,
   pRACH-Midamble
                                             PRACH-Midamble,
   rACH
                                             RACH-Parameter-CTCH-SetupRgstTDD,
   iE-Extensions
                                             OPTIONAL,
PRACH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
RACH-Parameter-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRgstTDD }}
RACH-ParameterIE-CTCH-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
     ID id-RACH-ParameterItem-CTCH-SetupRgstTDD CRITICALITY reject TYPE RACH-ParameterItem-CTCH-SetupRgstTDD PRESENCE mandatory }
RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID
                                             CommonTransportChannelID,
    uL-TransportFormatSet
                                             TransportFormatSet, -- For the UL
   iE-Extensions
                                             ProtocolExtensionContainer { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs} }
                                                                                                                           OPTIONAL,
RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                     CRITICALITY ignore EXTENSION BindingID
                                                                                           PRESENCE optional } |
       -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-transportlayeraddress
                                     CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                           PRESENCE optional } |
       -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                     CRITICALITY ignore EXTENSION TnlOos
                                                                                           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-SetupRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                             CommonPhysicalChannelID,
    t.FCS
                                             TFCS,
   timeslotLCR
                                             TimeSlotLCR,
                                             TDD-ChannelisationCodeLCR,
    tdd-ChannelisationCodeLCR
   midambleShiftLCR
                                             MidambleShiftLCR,
   rACH
                                             RACH-Parameter-CTCH-SetupRqstTDD,
   iE-Extensions
                                             OPTIONAL,
PRACH-LCR-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    EXTENSION UARFCN
                                                                     PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency of secondary on which PRACH to be set up.
PRACH-768-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                             CommonPhysicalChannelID768.
    t FCS
                                             TFCS,
   timeslot
                                             TimeSlot,
    tdd-ChannelisationCode768
                                             TDD-ChannelisationCode768,
    maxPRACH-MidambleShifts
                                             MaxPRACH-MidambleShifts.
   pRACH-Midamble
                                             PRACH-Midamble,
                                             RACH-Parameter-CTCH-SetupRgstTDD,
   rACH
                                             ProtocolExtensionContainer { { PRACH-768-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
```

```
PRACH-768-ParametersItem-CTCH-SetupRgstTDD-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-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                           CRITICALITY reject
                                                    EXTENSION UARFON
                                                                            PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency of Secondary Frequency on which FPACH to be set
up.
PLCCH-parameters ::= SEQUENCE {
    maxPowerPLCCH
                                                DL-Power,
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    timeslotLCR
                                                TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
                                                ProtocolExtensionContainer { { PLCCH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                      OPTIONAL,
PLCCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-RUCCH-parameters ::= SEQUENCE {
                                                CommonPhysicalChannelID,
    commonPhysicalChannelID
    timeslot
                                                TimeSlot,
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    maxE-RUCCH-MidambleShifts
                                                MaxPRACH-MidambleShifts,
    e-RUCCH-Midamble
                                                PRACH-Midamble,
                                                ProtocolExtensionContainer { { E-RUCCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                      OPTIONAL,
E-RUCCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-RUCCH-768-parameters ::= SEQUENCE {
    commonPhysicalChannelID768
                                                CommonPhysicalChannelID768,
    timeslot
                                                TimeSlot,
    tdd-ChannelisationCode768
                                                TDD-ChannelisationCode768,
```

```
maxE-RUCCH-MidambleShifts
                                         MaxPRACH-MidambleShifts,
   e-RUCCH-Midamble
                                         PRACH-Midamble.
   iE-Extensions
                                         ProtocolExtensionContainer { { E-RUCCH-768-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
   OPTIONAL,
E-RUCCH-768-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ******************
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
        ****************
CommonTransportChannelSetupResponse ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                {{CommonTransportChannelSetupResponse-IEs}},
                                                {{CommonTransportChannelSetupResponse-Extensions}}
   protocolExtensions
                        ProtocolExtensionContainer
                                                                                              OPTIONAL,
CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
     PRESENCE optional }
     ID id-PCH-Parameters-CTCH-SetupRsp
                                         CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
                                                                                                          PRESENCE optional
     ID id-RACH-Parameters-CTCH-SetupRsp
                                         CRITICALITY ignore TYPE CommonTransportChannel-InformationResponse
                                                                                                          PRESENCE optional
    ID id-CriticalityDiagnostics
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                          PRESENCE optional },
   . . .
CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse
  COMMON TRANSPORT CHANNEL SETUP FAILURE
  ************
CommonTransportChannelSetupFailure ::= SEQUENCE {
                       ProtocolIE-Container
                                                {{CommonTransportChannelSetupFailure-IEs}},
   protocolIEs
                                               {{CommonTransportChannelSetupFailure-Extensions}}
   protocolExtensions
                       ProtocolExtensionContainer
                                                                                              OPTIONAL,
   . . .
CommonTransportChannelSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
    ID
         id-Cause
                                  CRITICALITY ignore
                                                      TYPE
                                                             Cause
                                                                                                   PRESENCE mandatory
    ID
         id-CriticalityDiagnostics CRITICALITY ignore
                                                      TYPE
                                                             CriticalityDiagnostics
                                                                                                   PRESENCE optional
```

```
CommonTransportChannelSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST FDD
  *******************
CommonTransportChannelReconfigurationRequestFDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}}
                                                                                                                     OPTIONAL.
CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                          CRITICALITY reject TYPE C-ID
                                                                                                                           PRESENCE mandatory
} |
    ID id-ConfigurationGenerationID
                                                         CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                           PRESENCE mandatory
     ID id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD
                                                       CRITICALITY reject TYPE CommonPhysicalChannelType-CTCH-ReconfRqstFDD PRESENCE
mandatory },
CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-ReconfRqstFDD ::= CHOICE
    secondary-CCPCH-parameters
                                  Secondary-CCPCHList-CTCH-ReconfRqstFDD,
                                  PRACHList-CTCH-ReconfRqstFDD,
   pRACH-parameters
   notUsed-cPCH-parameters
                                  NULL,
Secondary-CCPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    fACH-ParametersList-CTCH-ReconfRqstFDD
                                              FACH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
    pCH-Parameters-CTCH-ReconfRqstFDD
                                              PCH-Parameters-CTCH-ReconfRqstFDD
                                                                                     OPTIONAL,
   pICH-Parameters-CTCH-ReconfRqstFDD
                                              PICH-Parameters-CTCH-ReconfRqstFDD
                                                                                     OPTIONAL,
                                              ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MICH-Parameters-CTCH-ReconfRqstFDD
                                                  CRITICALITY reject EXTENSION MICH-Parameters-CTCH-ReconfRqstFDD
                                                                                                                        PRESENCE optional },
FACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-ReconfRqstFDD }}
FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
```

```
{ ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                    CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                     PRESENCE mandatory }
FACH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEOUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRgstFDD
FACH-ParametersItem-CTCH-ReconfRgstFDD ::= SEQUENCE {
    commonTransportChannelID
                                         CommonTransportChannelID,
   maxFACH-Power
                                         DL-Power
                                                        OPTIONAL,
   toAWS
                                         TOAWS
                                                         OPTIONAL,
    toAWE
                                         ToAWE
                                                        OPTIONAL,
   iE-Extensions
                                         ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                        OPTIONAL,
    . . .
FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID
          id-TnlOos
                              CRITICALITY ignore
                                                     EXTENSION TnlOos
                                                                        PRESENCE optional },
    . . .
PCH-Parameters-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-ReconfRgstFDD }}
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-ReconfRgstFDD ::= SEQUENCE {
    commonTransportChannelID
                                         CommonTransportChannelID,
   pCH-Power
                                         DL-Power
                                                         OPTIONAL,
   toAWS
                                         ToAWS
                                                        OPTIONAL,
   t.oAWE
                                         ToAWE
                                                        OPTIONAL,
                                         ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                           OPTIONAL,
PCH-ParametersItem-CTCH-ReconfRostFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID
          id-TnlOos
                              CRITICALITY ignore
                                                    EXTENSION TnlOos
                                                                        PRESENCE optional }.
    . . .
PICH-Parameters-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRgstFDD }}
PICH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    PICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   pICH-Power
                                     PICH-Power
                                                     OPTIONAL,
   iE-Extensions
                                     ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs} }
                                                                                                                     OPTIONAL,
    . . .
PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
MICH-Parameters-CTCH-ReconfRqstFDD ::= SEOUENCE {
   commonPhysicalChannelID
                                  CommonPhysicalChannelID,
   mICH-Power
                                  PICH-Power
                                                                                                       OPTIONAL.
                                  ProtocolExtensionContainer { { MICH-Parameters-CTCH-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                       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-ReconfRgstFDD
                                         AICH-ParametersList-CTCH-ReconfRgstFDD OPTIONAL,
                                         iE-Extensions
PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersListIEs-CTCH-ReconfRqstFDD }}
PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   PRACH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRgstFDD
PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   preambleSignatures
                                     PreambleSignatures
                                                                                                            OPTIONAL,
   allowedSlotFormatInformation
                                     AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD
                                                                                                            OPTIONAL,
   rACH-SubChannelNumbers
                                     RACH-SubChannelNumbers
                                                                                                            OPTIONAL,
                                     ProtocolExtensionContainer { PRACH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs} }
   iE-Extensions
                                                                                                            OPTIONAL,
PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID
                       CRITICALITY ignore
                                                             PRESENCE optional },
     id-TnlOos
                                            EXTENSION TnlQos
AllowedSlotFormatInformationList-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
ReconfRqstFDD
AllowedSlotFormatInformationItem-CTCH-ReconfRgstFDD ::= SEQUENCE
   rACH-SlotFormat
                                     RACH-SlotFormat,
   iE-Extensions
                                     OPTIONAL,
   . . .
```

```
AllowedSlotFormatInformationItem-CTCH-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}
AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
AICH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRgstFDD
AICH-ParametersItem-CTCH-ReconfRgstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                   CommonPhysicalChannelID,
                                                  OPTIONAL,
   aICH-Power
                                   AICH-Power
   iE-Extensions
                                   ProtocolExtensionContainer { { AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                  OPTIONAL,
AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                  {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
                         ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL,
CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                              CRITICALITY reject TYPE C-ID
                                                                                                          PRESENCE mandatory }
     ID id-ConfigurationGenerationID
                                              CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                          PRESENCE mandatory
     PRESENCE
optional }|
     ID id-PICH-Parameters-CTCH-ReconfRqstTDD
                                                                                                          PRESENCE optional }
                                              CRITICALITY reject TYPE PICH-Parameters-CTCH-ReconfRqstTDD
     ID id-FACH-ParametersList-CTCH-ReconfRqstTDD CRITICALITY reject TYPE FACH-ParametersList-CTCH-ReconfRqstTDD
                                                                                                          PRESENCE optional }
     ID id-PCH-Parameters-CTCH-ReconfRgstTDD
                                              CRITICALITY reject TYPE PCH-Parameters-CTCH-ReconfRqstTDD
                                                                                                          PRESENCE optional }.
CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                     CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-ReconfRgstTDD
   PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only
   { ID id-MICH-Parameters-CTCH-ReconfRqstTDD
                                                     CRITICALITY reject EXTENSION MICH-Parameters-CTCH-ReconfRqstTDD
   PRESENCE optional } |
```

```
{ ID id-PLCCH-Parameters-CTCH-ReconfRqstTDD
                                                            CRITICALITY ignore EXTENSION PLCCH-Parameters-CTCH-ReconfRqstTDD
    PRESENCE optional } |
    { ID id-S-CCPCH-768-Parameters-CTCH-ReconfRgstTDD
                                                            CRITICALITY reject EXTENSION Secondary-CCPCH-768-Parameters-CTCH-ReconfRqstTDD
    PRESENCE optional } |
    { ID id-PICH-768-Parameters-CTCH-ReconfRgstTDD
                                                            CRITICALITY reject EXTENSION PICH-768-Parameters-CTCH-ReconfRgstTDD
    PRESENCE optional } |
                                                            CRITICALITY reject EXTENSION MICH-768-Parameters-CTCH-ReconfRqstTDD
    { ID id-MICH-768-Parameters-CTCH-ReconfRgstTDD
    PRESENCE optional }
    { ID id-UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                            CRITICALITY reject EXTENSION UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                                                                                                           PRESENCE
optional }, -- Applicable to 1.28Mcps TDD only
Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD::= SEQUENCE {
                                   CCTrCH-ID,
    cCTrCH-ID
    secondaryCCPCHList
                                    Secondary-CCPCHList-CTCH-ReconfRgstTDD
                                                                                    OPTIONAL.
                                    ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                      OPTIONAL,
Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD
                                                                        CRITICALITY reject EXTENSION Secondary-CCPCH-parameterExtendedList-CTCH-
ReconfRastTDD
                   PRESENCE optional }|
    -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
    { ID id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                                        CRITICALITY reject EXTENSION Secondary-CCPCH-LCR-parameterExtendedList-
CTCH-ReconfRqstTDD PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
Secondary-CCPCHList-CTCH-ReconfRgstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCHListIEs-CTCH-ReconfRgstTDD }}
Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
                                                     CRITICALITY reject TYPE Secondary-CCPCHListIE-CTCH-ReconfRqstTDD PRESENCE mandatory }
Secondary-CCPCHListIE-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRqstTDD
Secondary-CCPCHItem-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    sCCPCH-Power
                                       DL-Power
                                                        OPTIONAL,
    iE-Extensions
                                       ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRgstTDD-ExtIEs} }
                                                                                                                            OPTIONAL.
Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-parameterExtendedList-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsinExt)) OF Secondary-CCPCHItem-CTCH-ReconfRgstTDD
    -- Applicable to 3.84Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
Secondary-CCPCH-LCR-parameterExtendedList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHsLCRinExt)) OF Secondary-CCPCHItem-CTCH-
ReconfRqstTDD
```

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```
-- Applicable to 1.28Mcps TDD only, used when more than maxNrOfSCCPCHs SCCPCHs are to be reconfigured.
PICH-Parameters-CTCH-ReconfRgstTDD
                                   ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    pICH-Power
                                        PICH-Power
                                                         OPTIONAL.
    iE-Extensions
                                        ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRgstTDD-ExtIEs} }
                                                                                                                           OPTIONAL,
PICH-Parameters-CTCH-ReconfRqstTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRgstTDD
FACH-ParametersItem-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
                                                    OPTIONAL,
    toAWS
                                    ToAWS
    toAWE
                                    ToAWE
                                                     OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { FACH-ParametersItem-CTCH-ReconfRgstTDD-ExtIEs} }
                                                                                                                           OPTIONAL,
FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD
                                                            CRITICALITY reject
                                                                                     EXTENSION DL-Power
                                                                                                                        PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    { ID
           id-TnlOos
                                                             CRITICALITY ignore
                                                                                                                        PRESENCE optional },
                                                                                     EXTENSION TnlOos
    . . .
PCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
    toAWS
                                    ToAWS
                                                    OPTIONAL,
    toAWE
                                    ToAWE
                                                    OPTIONAL,
                                    ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PCH-Power-LCR-CTCH-ReconfRqstTDD
                                                    CRITICALITY reject
                                                                             EXTENSION DL-Power
                                                                                                                      PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-TnlQos
                                                     CRITICALITY ignore
                                                                             EXTENSION TnlOos
                                                                                                                      PRESENCE optional },
    . . .
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-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    mICH-Power
                                        PICH-Power
                                                                                                                          OPTIONAL.
                                        ProtocolExtensionContainer { { MICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
MICH-Parameters-CTCH-ReconfRqstTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
PLCCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
   maxPowerPLCCH
    iE-Extensions
                                        ProtocolExtensionContainer { { PLCCH-Parameters-CTCH-ReconfRgstTDD-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
PLCCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-768-Parameters-CTCH-ReconfRqstTDD::= SEQUENCE {
    cCTrCH-ID
                                    CCTrCH-ID,
    secondaryCCPCH768List
                                    Secondary-CCPCH-768-List-CTCH-ReconfRqstTDD
                                    ProtocolExtensionContainer { { Secondary-CCPCH-768-CTCH-ReconfRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
Secondary-CCPCH-768-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-768-List-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs768)) OF Secondary-CCPCH-768-Item-CTCH-ReconfRgstTDD
Secondary-CCPCH-768-Item-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                        CommonPhysicalChannelID768,
    sCCPCH-Power
                                        DL-Power
                                                        OPTIONAL,
   iE-Extensions
                                        ProtocolExtensionContainer { { Secondary-CCPCH-768-Item-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                                   OPTIONAL,
Secondary-CCPCH-768-Item-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
PICH-768-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                        CommonPhysicalChannelID768,
    pICH-Power
                                        PICH-Power
                                                        OPTIONAL,
                                        ProtocolExtensionContainer { { PICH-768-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
```

```
PICH-768-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-768-Parameters-CTCH-ReconfRgstTDD ::= SEQUENCE
                                      CommonPhysicalChannelID768,
   commonPhysicalChannelID768
   mICH-Power
                                      PICH-Power
                                                                                                                       OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { MICH-768-Parameters-CTCH-ReconfRgstTDD-ExtIEs} }
                                                                                                                       OPTIONAL,
MICH-768-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
   uPPCHPositionLCR
                                  UPPCHPositionLCR
                                                         OPTIONAL,
                                  UARFCN
                                                         OPTIONAL,
   -- Mandatory for 1.28Mcps TDD when using multiple frequencies Corresponds to Nt [15]
   iE-Extensions
                                  ProtocolExtensionContainer { { UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ******************
-- COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
__ *******************************
CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{CommonTransportChannelReconfigurationResponse-IEs}},
                          ProtocolExtensionContainer {{CommonTransportChannelReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID
           id-CriticalityDiagnostics
                                                                         TYPE
                                                                                 CriticalityDiagnostics
                                                                                                                  PRESENCE optional },
                                          CRITICALITY
                                                          ignore
CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
```

```
__ *******************
CommonTransportChannelReconfigurationFailure ::= SEQUENCE
   protocolIEs
                       ProtocolIE-Container
                                               {{CommonTransportChannelReconfigurationFailure-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{CommonTransportChannelReconfigurationFailure-Extensions}}
                                                                                                         OPTIONAL.
CommonTransportChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
                                    CRITICALITY ignore
         id-Cause
                                                            TYPE
                                                                                                   PRESENCE mandatory } |
                                                                   Cause
   { ID
         id-CriticalityDiagnostics
                                    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 ::= {
    TD
         id-C-ID
                                        CRITICALITY reject
                                                            TYPE C-ID
                                                                                                 PRESENCE mandatory }
         id-CommonPhysicalChannelID
                                        CRITICALITY reject
                                                            TYPE CommonPhysicalChannelID
                                                                                                 PRESENCE mandatory } |
         id-ConfigurationGenerationID
                                                            TYPE ConfigurationGenerationID
                                                                                                 PRESENCE mandatory },
    ID
                                        CRITICALITY reject
CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::=
   . . .
    COMMON TRANSPORT CHANNEL DELETION RESPONSE
     ************
CommonTransportChannelDeletionResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                               {{CommonTransportChannelDeletionResponse-IEs}},
                                              {{CommonTransportChannelDeletionResponse-Extensions}}
   protocolExtensions
                       ProtocolExtensionContainer
                                                                                                   OPTIONAL,
```

```
CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
         id-CriticalityDiagnostics
                                     CRITICALITY
                                                   ignore
                                                              TYPE
                                                                     CriticalityDiagnostics
                                                                                                      PRESENCE optional },
   . . .
CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- BLOCK RESOURCE REQUEST
  BlockResourceRequest ::= SEQUENCE {
                    ProtocolIE-Container
                                                {{BlockResourceRequest-IEs}},
   protocolIEs
                       ProtocolExtensionContainer {{BlockResourceRequest-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
   . . .
BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                     CRITICALITY reject
                                                          TYPE C-ID
                                                                                                    PRESENCE mandatory
     ID id-BlockingPriorityIndicator
                                     CRITICALITY reject
                                                          TYPE BlockingPriorityIndicator
                                                                                                    PRESENCE mandatory
                                     CRITICALITY reject
                                                                                                    PRESENCE conditional },
   { ID id-ShutdownTimer
                                                          TYPE ShutdownTimer
   -- The IE shall be present if the Blocking Priority Indicator IE indicates "Normal Priority"--
BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ****************
-- BLOCK RESOURCE RESPONSE
BlockResourceResponse ::= SEQUENCE {
                                                    {{BlockResourceResponse-IEs}},
   protocolIEs
                           ProtocolIE-Container
   protocolExtensions
                           ProtocolExtensionContainer {{BlockResourceResponse-Extensions}}
                                                                                                      OPTIONAL,
BlockResourceResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                  CRITICALITY ignore
                                                       TYPE CriticalityDiagnostics
                                                                                  PRESENCE optional },
   . . .
BlockResourceResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
__ *********************
-- BLOCK RESOURCE FAILURE
    BlockResourceFailure ::= SEQUENCE {
   protocolIEs
                     ProtocolIE-Container
                                                {{BlockResourceFailure-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer
                                              {{BlockResourceFailure-Extensions}}
                                                                                 OPTIONAL,
BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                  CRITICALITY ignore
                                                      TYPE Cause
                                                                                                  PRESENCE mandatory
   { ID id-CriticalityDiagnostics
                                  CRITICALITY ignore
                                                      TYPE CriticalityDiagnostics
                                                                                                  PRESENCE optional
BlockResourceFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- UNBLOCK RESOURCE INDICATION
__ *********************
UnblockResourceIndication ::= SEQUENCE {
                 ProtocolIE-Container
                                                {{UnblockResourceIndication-IEs}},
   protocolIEs
                                               {{UnblockResourceIndication-Extensions}}
   protocolExtensions
                     ProtocolExtensionContainer
                                                                                     OPTIONAL,
UnblockResourceIndication-IES NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                CRITICALITY ignore
                                         TYPE C-ID
                                                          PRESENCE mandatory },
UnblockResourceIndication-Extensions NBAP-PROTOCOL-EXTENSION ::=
-- AUDIT REOUIRED INDICATION
__ *********************
AuditRequiredIndication ::= SEQUENCE {
                                                {{AuditRequiredIndication-IEs}},
   protocolIEs
                    ProtocolIE-Container
   protocolExtensions ProtocolExtensionContainer {{AuditRequiredIndication-Extensions}}
                                                                                                  OPTIONAL,
```

```
AuditRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
AuditRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- AUDIT REQUEST
  AuditRequest ::= SEQUENCE {
                                                       {{AuditRequest-IEs}},
   protocolIEs
                             ProtocolIE-Container
                                                      {{AuditRequest-Extensions}}
                             ProtocolExtensionContainer
   protocolExtensions
                                                                                   OPTIONAL,
AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-Start-Of-Audit-Sequence-Indicator
                                                                                                            PRESENCE mandatory },
                                               CRITICALITY reject TYPE Start-Of-Audit-Sequence-Indicator
   . . .
AuditReguest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    -- AUDIT RESPONSE
  **************
AuditResponse ::= SEQUENCE {
                                                       {{AuditResponse-IEs}},
   protocolIEs
                             ProtocolIE-Container
                                                      {{AuditResponse-Extensions}}
   protocolExtensions
                             ProtocolExtensionContainer
                                                                                       OPTIONAL,
AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
     ID id-End-Of-Audit-Sequence-Indicator
                                                                                                                 PRESENCE mandatory } |
                                                   CRITICALITY ignore TYPE End-Of-Audit-Sequence-Indicator
     ID id-Cell-InformationList-AuditRsp
                                                   CRITICALITY ignore TYPE Cell-InformationList-AuditRsp
                                                                                                                 PRESENCE optional
                                                                                                                 PRESENCE optional }
    { ID id-CCP-InformationList-AuditRsp
                                                   CRITICALITY ignore TYPE CCP-InformationList-AuditRsp
   -- 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
                                                                                                                 PRESENCE optional },
   { ID id-CriticalityDiagnostics
                                                   CRITICALITY ignore TYPE CriticalityDiagnostics
AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-Power-Local-Cell-Group-InformationList-AuditRsp CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList-AuditRsp
    PRESENCE optional }.
    . . .
Cell-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}
Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
           id-Cell-InformationItem-AuditRsp
                                                    CRITICALITY ignore
                                                                            TYPE Cell-InformationItem-AuditRsp
                                                                                                                          PRESENCE optional }
Cell-InformationItem-AuditRsp ::= SEQUENCE {
                                            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,
                                            P-CPICH-Information-AuditRsp
                                                                                        OPTIONAL,
    primary-CPICH-Information
    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
                                            PICH-Information-AuditRsp
                                                                                        OPTIONAL,
    fACH-InformationList
                                            FACH-InformationList-AuditRsp
                                                                                        OPTIONAL,
    pRACH-InformationList
                                            PRACH-InformationList-AuditRsp
                                                                                        OPTIONAL,
    rACH-InformationList
                                            RACH-InformationList-AuditRsp
                                                                                        OPTIONAL,
                                            AICH-InformationList-AuditRsp
    aICH-InformationList
                                                                                        OPTIONAL,
    notUsed-1-pCPCH-InformationList
                                            NULL
                                                                                        OPTIONAL,
    notUsed-2-cPCH-InformationList
                                            NULL
                                                                                        OPTIONAL,
    notUsed-3-aP-AICH-InformationList
                                            NULL
                                                                                        OPTIONAL,
    notUsed-4-cDCA-ICH-InformationList
                                            NULL
                                                                                        OPTIONAL,
    sCH-Information
                                            SCH-Information-AuditRsp
                                                                                        OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs} }
                                                                                                                       OPTIONAL,
Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-FPACH-LCR-InformationList-AuditRsp
                                                                                                                             PRESENCE optional } |
                                                    CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-AuditRsp
    -- Applicable to 1.28Mcps TDD only
    { ID id-DwPCH-LCR-InformationList-AuditRsp
                                                    CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-HSDSCH-Resources-Information-AuditRsp
                                                  CRITICALITY ignore EXTENSION HS-DSCH-Resources-Information-AuditRsp
                                                                                                                             PRESENCE optional }
    -- For 1.28Mcps TDD, this HS-DSCH Resource Information is for the first Frequency repetition, HS-DSCH Resource Information for Frequency
repetitions 2 and on, should be defined in MultipleFreg-HS-DSCH-Resources-InformationList-AuditRsp.
      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.
    { ID id-S-CCPCH-LCR-InformationListExt-AuditRsp CRITICALITY ignore EXTENSION S-CCPCH-LCR-InformationListExt-AuditRsp
                                                                                                                                PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHcell SCCPCHs in the cell.
    { ID id-E-DCH-Resources-Information-AuditRsp
                                                    CRITICALITY ignore EXTENSION E-DCH-Resources-Information-AuditRsp
                                                                                                                                PRESENCE optional } |
```

```
-- For 1.28Mcps TDD, this E-DCH Resource Information is for the first Frequency repetition, E-DCH Resource Information for Frequency
repetitions 2 and on, should be defined in MultipleFreq-E-DCH-Resources-InformationList-AuditRsp.
     ID id-PLCCH-InformationList-AuditRsp
                                              CRITICALITY ignore EXTENSION PLCCH-InformationList-AuditRsp
                                                                                                                PRESENCE optional
     ID id-P-CCPCH-768-Information-AuditRsp
                                              CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional
     ID id-S-CCPCH-768-InformationList-AuditRsp
                                              CRITICALITY ignore EXTENSION S-CCPCH-768-InformationList-AuditRsp
                                                                                                                PRESENCE optional
                                              CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional
     ID id-PICH-768-Information-AuditRsp
                                              CRITICALITY ignore EXTENSION PRACH-768-InformationList-AuditRsp
     ID id-PRACH-768-InformationList-AuditRsp
                                                                                                                PRESENCE optional
     ID id-SCH-768-Information-AuditRsp
                                              CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional
     ID id-MICH-768-Information-AuditRsp
                                              CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768 PRESENCE optional
     ID id-E-RUCCH-InformationList-AuditRsp
                                              CRITICALITY ignore EXTENSION E-RUCCH-InformationList-AuditRsp
                                                                                                                PRESENCE optional
     ID id-E-RUCCH-768-InformationList-AuditRsp
                                              CRITICALITY ignore EXTENSION E-RUCCH-768-InformationList-AuditRsp
                                                                                                                PRESENCE optional }
    ID id-Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp
                                                           CRITICALITY ignore EXTENSION Cell-Frequency-List-Information-LCR-MulFreq-
           PRESENCE optional } -- Applicable to 1.28Mcps TDD when using multiple frequencies
AuditRsp
   { ID id-UPPCH-LCR-InformationList-AuditRsp
                                              CRITICALITY ignore
                                                                   EXTENSION UPPCH-LCR-InformationList-AuditRsp
                                                                                                             PRESENCE optional } |
     -- Applicable to 1.28Mcps TDD only
   { ID id-multipleFreg-HS-DSCH-Resources-InformationList-AuditRsp CRITICALITY ignore EXTENSION MultipleFreg-HS-DSCH-Resources-InformationList-
AuditRsp PRESENCE optional } |
-- Applicable to 1.28Mcps TDD when using multiple frequencies. This HS-DSCH Resource Information is for the 2nd and beyond frequencies.
    AuditRsp PRESENCE optional },
   -- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-DCH Resource Information is for the 2nd and beyond frequencies.
P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}
P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}
S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}
P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    ID id-P-CPICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                      PRESENCE mandatory }
S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}
S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-S-CPICH-Information CRITICALITY ignore
                                                 TYPE Common-PhysicalChannel-Status-Information
                                                                                                        PRESENCE mandatory }
P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}
P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    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 ::= {
   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 ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}
AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::=
                                                                                       PRESENCE mandatory }
   SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}
SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

```
FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}
FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { 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,
                                    ProtocolExtensionContainer {{ HS-DSCH-Resources-Information-AuditRsp-ExtIEs }}
   iE-Extensions
                                                                                                                  OPTIONAL,
HS-DSCH-Resources-Information-AuditRsp-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                         CRITICALITY ignore
                                                                                optional },
                                               EXTENSION UARFCN
                                                                      PRESENCE
    -- Applicable to 1.28Mcps TDD when using multiple frequencies.
    . . .
S-CCPCH-InformationListExt-AuditRsp ::= SEOUENCE (SIZE (1..maxSCCPCHCellinExt)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
AuditRsp }}
S-CCPCH-LCR-InformationListExt-AuditRsp ::= SEQUENCE (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 ::= {
                         CRITICALITY ignore
    { ID id-UARFCNforNt
                                               EXTENSION UARFCN
                                                                     PRESENCE
                                                                                optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies.
    . . .
PLCCH-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxPLCCHCell)) OF ProtocolIE-Single-Container {{ PLCCH-InformationItemIE-AuditRsp }}
PLCCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
S-CCPCH-768-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxSCCPCHCell768)) OF ProtocolIE-Single-Container {{ S-CCPCH-768-InformationItemIE-
AuditRsp }}
S-CCPCH-768-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
PRACH-768-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-768-InformationItemIE-AuditRsp }}
PRACH-768-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
```

```
{ ID id-PRACH-768-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information768
                                                                                                            PRESENCE mandatory }
E-RUCCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-InformationItemIE-AuditRsp }}
E-RUCCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-E-RUCCH-Information CRITICALITY ignore
                                                 TYPE Common-PhysicalChannel-Status-Information
                                                                                                            PRESENCE mandatory }
E-RUCCH-768-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-768-InformationItemIE-
AuditRsp }}
E-RUCCH-768-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ Cell-Frequency-
List-InformationIE-LCR-MulFreq-AuditRsp }}
Cell-Frequency-List-InformationIE-LCR-MulFreq-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp
                                                                CRITICALITY ignore TYPE Cell-Frequency-List-InformationItem-LCR-MulFreq-
              PRESENCE mandatory }
AuditRsp
Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp ::= SEQUENCE
   uARFCN
                                    UARFCN.
   resourceOperationalState
                                    ResourceOperationalState,
   availabilityStatus
                                    AvailabilityStatus,
                                    ProtocolExtensionContainer {{ Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp-ExtIEs }}
   iE-Extensions
   OPTIONAL,
   . . .
Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UPPCH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ UPPCH-LCR-InformationIE-AuditRsp
}}
UPPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
UPPCH-LCR-InformationItem-AuditRsp ::= SEOUENCE {
   uARFCN
                                    UARFCN
                                                      OPTIONAL.
   uPPCHPositionLCR
                                    UPPCHPositionLCR,
   resourceOperationalState
                                    ResourceOperationalState,
   availabilityStatus
                                    AvailabilityStatus,
                                    ProtocolExtensionContainer {{ UPPCH-LCR-InformationItem-AuditRsp-ExtIEs }}
   iE-Extensions
                                                                                                            OPTIONAL,
UPPCH-LCR-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
MultipleFreq-HS-DSCH-Resources-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container
{{ MultipleFreq-HS-DSCH-Resources-InformationItem-AuditRsp}}
--Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-HS-DSCH-Resources-InformationItem-AuditRsp NBAP-PROTOCOL-IES ::= {
    MultipleFreg-E-DCH-Resources-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container {{ MultipleFreg-
E-DCH-Resources-InformationItem-AuditRsp}}
   -- Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-E-DCH-Resources-InformationItem-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}
CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
                                               CRITICALITY ignore
   { ID id-CCP-InformationItem-AuditRsp
                                                                        TYPE CCP-InformationItem-AuditRsp
                                                                                                              PRESENCE mandatory }
CCP-InformationItem-AuditRsp ::= SEQUENCE {
   communicationControlPortID
                                    CommunicationControlPortID,
   resourceOperationalState
                                    ResourceOperationalState,
   availabilityStatus
                                    AvailabilityStatus,
   iE-Extensions
                                    ProtocolExtensionContainer {{ CCP-InformationItem-AuditRsp-ExtIEs }}
                                                                                                           OPTIONAL,
CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Local-Cell-InformationList-AuditRsp ::=SEOUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-
AuditRsp }}
Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-Local-Cell-InformationItem-AuditRsp
                                               CRITICALITY ignore TYPE Local-Cell-InformationItem-AuditRsp
                                                                                                         PRESENCE mandatory
Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
   local-Cell-ID
                                           Local-Cell-ID,
   dl-or-global-capacityCredit
                                           DL-or-Global-CapacityCredit,
   ul-capacityCredit
                                           UL-CapacityCredit
                                                                                                                   OPTIONAL,
   commonChannelsCapacityConsumptionLaw
                                           CommonChannelsCapacityConsumptionLaw,
                                           DedicatedChannelsCapacityConsumptionLaw,
   dedicatedChannelsCapacityConsumptionLaw
   maximumDL-PowerCapability
                                           MaximumDL-PowerCapability
                                                                                                                   OPTIONAL,
   minSpreadingFactor
                                           MinSpreadingFactor
                                                                                                                   OPTIONAL,
   minimumDL-PowerCapability
                                           MinimumDL-PowerCapability
                                                                                                                   OPTIONAL,
```

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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 ::= {
      ID id-ReferenceClockAvailability
                                                CRITICALITY ignore
                                                                            EXTENSION ReferenceClockAvailability
                                                                                                                          PRESENCE optional }
      ID id-Power-Local-Cell-Group-ID
                                                CRITICALITY ignore
                                                                            EXTENSION Local-Cell-ID
                                                                                                                          PRESENCE optional
      ID id-HSDPA-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION HSDPA-Capability
                                                                                                                          PRESENCE optional
                                                CRITICALITY ignore
                                                                                                                          PRESENCE optional }
      ID id-E-DCH-Capability
                                                                            EXTENSION E-DCH-Capability
    ID id-E-DCH-TTI2ms-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION E-DCH-TTI2ms-Capability
                                                                                                                          PRESENCE conditional }
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-SF-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION E-DCH-SF-Capability
                                                                                                                          PRESENCE conditional } |
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-HARO-Combining-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION E-DCH-HARO-Combining-Capability
                                                                                                                          PRESENCE conditional } |
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
      ID id-E-DCH-CapacityConsumptionLaw
                                                                            EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                          PRESENCE optional }
                                                CRITICALITY ignore
      ID id-F-DPCH-Capability
                                                                            EXTENSION F-DPCH-Capability
                                                                                                                          PRESENCE optional }
                                                CRITICALITY ignore
                                                                                                                          PRESENCE optional }
      ID id-E-DCH-TDD-CapacityConsumptionLaw
                                                CRITICALITY ignore
                                                                            EXTENSION E-DCH-TDD-CapacityConsumptionLaw
     ID id-ContinuousPacketConnectivityDTX-DRX-Capability
                                                                                                 EXTENSION ContinuousPacketConnectivityDTX-DRX-
                                                                    CRITICALITY ignore
Capability
                    PRESENCE
                                optional }|
    { ID id-Max-UE-DTX-Cycle
                                                CRITICALITY ignore
                                                                            EXTENSION Max-UE-DTX-Cycle
                                                                                                                          PRESENCE conditional } |
    -- The IE shall be present if Continuous Packet Connectivity DTX-DRX Capability IE is present and set to 'Continuous Packet Connectivity DTX-
DRX Capable'.
    { ID id-ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                    CRITICALITY ignore
                                                                                                 EXTENSION ContinuousPacketConnectivityHS-SCCH-less-
Capability
                    PRESENCE
                                optional }|
      ID id-MIMO-Capability
                                                CRITICALITY ignore
                                                                                                                          PRESENCE optional } |
                                                                            EXTENSION MIMO-Capability
      ID id-SixtyfourOAM-DL-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION SixtyfourOAM-DL-Capability
                                                                                                                          PRESENCE optional }
      ID id-MBMS-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION MBMS-Capability
                                                                                                                          PRESENCE optional
      ID id-Enhanced-FACH-Capability
                                                                            EXTENSION Enhanced-FACH-Capability
                                                                                                                          PRESENCE optional }
                                                CRITICALITY ignore
                                                                                                                          PRESENCE conditional } |
     ID id-Enhanced-PCH-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION Enhanced-PCH-Capability
    -- The IE shall be present if Enhanced FACH Capability IE is set to 'Enhanced FACH Capable'.
      ID id-SixteenQAM-UL-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION SixteenQAM-UL-Capability
                                                                                                                          PRESENCE optional
      ID id-HSDSCH-MACdPDU-SizeCapability
                                                CRITICALITY ignore
                                                                            EXTENSION HSDSCH-MACdPDU-SizeCapability
                                                                                                                          PRESENCE optional
      ID id-MBSFN-Only-Mode-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION MBSFN-Only-Mode-Capability
                                                                                                                          PRESENCE optional
      ID id-F-DPCH-SlotFormatCapability
                                                CRITICALITY ignore
                                                                            EXTENSION F-DPCH-SlotFormatCapability
                                                                                                                          PRESENCE optional
      ID id-E-DCH-MACdPDU-SizeCapability
                                                CRITICALITY ignore
                                                                            EXTENSION E-DCH-MACdPDU-SizeCapability
                                                                                                                          PRESENCE optional
      ID id-Common-EDCH-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION Common-EDCH-Capability
                                                                                                                          PRESENCE optional
    ID id-E-AI-Capability
                                                                        EXTENSION E-AI-Capability
                                                                                                                          PRESENCE optional }
                                            CRITICALITY ignore
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
                                                                            EXTENSION Enhanced-UE-DRX-Capability
    { ID id-Enhanced-UE-DRX-Capability
                                                 CRITICALITY ignore
                                                                                                                          PRESENCE optional }
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
     ID id-Enhanced-UE-DRX-CapabilityLCR
                                                CRITICALITY ignore
                                                                            EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                          PRESENCE optional } |
      ID id-E-DPCCH-Power-Boosting-Capability
                                                CRITICALITY ignore
                                                                            EXTENSION E-DPCCH-Power-Boosting-Capability PRESENCE optional }
     ID id-SixtvfourOAM-DL-MIMO-Combined-Capability
                                                       CRITICALITY ignore EXTENSION SixtyfourOAM-DL-MIMO-Combined-Capability
    PRESENCE
               conditional }
    { ID id-Multi-Cell-Capability-Info
                                                CRITICALITY ignore
                                                                            EXTENSION Multi-Cell-Capability-Info
                                                                                                                          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 ::= {
```

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Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
   local-Cell-Group-ID
                                            Local-Cell-ID,
    dl-or-global-capacityCredit
                                            DL-or-Global-CapacityCredit,
   ul-capacityCredit
                                            UL-CapacityCredit
                                                                                 OPTIONAL,
    commonChannelsCapacityConsumptionLaw
                                            CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                            DedicatedChannelsCapacityConsumptionLaw,
                                            ProtocolExtensionContainer {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
    iE-Extensions
                                                                                                                          OPTIONAL,
Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-CapacityConsumptionLaw
                                            CRITICALITY ignore
                                                                      EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                PRESENCE optional }
     ID id-E-DCH-TDD-CapacityConsumptionLaw
                                            CRITICALITY ignore
                                                                      EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                               PRESENCE optional },
    . . .
Power-Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-
Group-InformationItemIE-AuditRsp }}
Power-Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::=
    { ID
          id-Power-Local-Cell-Group-InformationItem-AuditRsp
                                                                  CRITICALITY
                                                                                 ignore
                                                                                            TYPE Power-Local-Cell-Group-InformationItem-
AuditRsp
              PRESENCE
                         mandatory}
Power-Local-Cell-Group-InformationItem-AuditRsp ::= SEOUENCE {
   power-Local-Cell-Group-ID
                                            Local-Cell-ID,
   maximumDL-PowerCapability
                                            MaximumDL-PowerCapability,
   iE-Extensions
                                            ProtocolExtensionContainer {{ Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
   OPTIONAL,
    . . .
Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- AUDIT FAILURE
   ******************
AuditFailure ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{AuditFailure-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{AuditFailure-Extensions}}
                                                                                    OPTIONAL.
AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Cause
                                        CRITICALITY ignore
                                                                  TYPE Cause
                                                                                                             PRESENCE mandatory
```

```
{ ID id-CriticalityDiagnostics
                                          CRITICALITY ignore
                                                                     TYPE CriticalityDiagnostics
                                                                                                                  PRESENCE optional
AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
        -- COMMON MEASUREMENT INITIATION REQUEST
__ **********************
CommonMeasurementInitiationRequest ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{CommonMeasurementInitiationRequest-IEs}},
                                                      {{CommonMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                  OPTIONAL,
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 }
     ID id-RTWP-ReportingIndicator
                                                                                 EXTENSION RTWP-ReportingIndicator
                                                         CRITICALITY reject
    PRESENCE optional } |
    { ID id-RTWP-CellPortion-ReportingIndicator
                                                          CRITICALITY reject
                                                                                 EXTENSION RTWP-CellPortion-ReportingIndicator
    PRESENCE optional } |
    { ID id-Reference-ReceivedTotalWideBandPowerReporting
                                                                                 EXTENSION Reference-ReceivedTotalWideBandPowerReporting
                                                          CRITICALITY ignore
    PRESENCE optional }
    { ID id-GANSS-Time-ID
                                                                                                                        PRESENCE optional },
                                                          CRITICALITY ignore
                                                                                 EXTENSION GANSS-Time-ID
CommonMeasurementObjectType-CM-Rgst ::= CHOICE {
    cell
                                  Cell-CM-Rqst,
   rACH
                                  RACH-CM-Rast,
   notUsed-cPCH
                                  NULL,
    extension-CommonMeasurementObjectType-CM-Rgst
                                                      Extension-CommonMeasurementObjectType-CM-Rgst
Extension-CommonMeasurementObjectType-CM-Rqst ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RqstIE }}
```

```
Extension-CommonMeasurementObjectType-CM-RqstIE NBAP-PROTOCOL-IES ::= {
     ID id-Power-Local-Cell-Group-choice-CM-Rgst CRITICALITY reject TYPE PowerLocalCellGroup-CM-Rgst
                                                                                                                 PRESENCE mandatory } |
     ID id-ERACH-CM-Rost
                                                   CRITICALITY ignore TYPE ERACH-CM-Rost
                                                                                                                 PRESENCE mandatory }
       -- FDD only
ERACH-CM-Rgst ::= SEQUENCE {
   c-ID
                                   C-ID,
   iE-Extensions
                                   ProtocolExtensionContainer { { ERACHItem-CM-Rqst-ExtIEs} } OPTIONAL,
ERACHItem-CM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-CM-Rast ::= SEQUENCE {
   c-ID
                                   C-ID,
                                              OPTIONAL, -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
   timeSlot
                                   TimeSlot.
   iE-Extensions
                                   ProtocolExtensionContainer { { CellItem-CM-Rgst-ExtIEs} } 
                                                                                                                 OPTIONAL,
CellItem-CM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-TimeSlotLCR-CM-Rqst
                                                   CRITICALITY reject EXTENSION TimeSlotLCR
                                                                                                                      PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    {ID id-NeighbouringCellMeasurementInformation
                                                  CRITICALITY ignore EXTENSION NeighbouringCellMeasurementInformation PRESENCE optional }
    {ID id-UARFCNforNt
                                                   CRITICALITY reject EXTENSION UARFON
                                                                                                                      PRESENCE optional }
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies and the requested common measurementype is the one except for "HS-DSCH Required
Power" or "HS-DSCH Provided Bit Rate"
    {ID id-UPPCHPositionLCR
                                                                                                                      PRESENCE optional } |
                                                   CRITICALITY reject EXTENSION UPPCHPositionLCR
    -- Applicable to 1.28Mcps TDD only
   {ID id-AdditionalTimeSlotListLCR
                                                  CRITICALITY ignore EXTENSION AdditionalTimeSlotListLCR
                                                                                                                      PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
RACH-CM-Rqst ::= SEQUENCE {
                                   C-ID,
   commonTransportChannelID
                                   CommonTransportChannelID,
   iE-Extensions
                                   OPTIONAL,
RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerLocalCellGroup-CM-Rgst ::= SEQUENCE {
   powerLocalCellGroupID
                                   Local-Cell-ID,
   iE-Extensions
                                   ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rqst-ExtIEs }}
                                                                                                                 OPTIONAL,
```

```
PowerLocalCellGroup-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT INITIATION RESPONSE
CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs
                            ProtocolIE-Container
                                                         {{CommonMeasurementInitiationResponse-IEs}},
   protocolExtensions
                            ProtocolExtensionContainer
                                                        {{CommonMeasurementInitiationResponse-Extensions}}
                                                                                                                        OPTIONAL.
CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
      ID id-MeasurementID
                                                     CRITICALITY ignore
                                                                             TYPE MeasurementID
                                                                                                                        PRESENCE mandatory
      ID id-CommonMeasurementObjectType-CM-Rsp
                                                                                                                        PRESENCE optional } |
                                                     CRITICALITY ignore
                                                                             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
                                                                                                                              PRESENCE optional
                                                                             EXTENSION CommonMeasurementAccuracy
      ID id-MeasurementRecoverySupportIndicator
                                                    CRITICALITY ignore
                                                                             EXTENSION MeasurementRecoverySupportIndicator
                                                                                                                              PRESENCE optional
      ID id-Reference-ReceivedTotalWideBandPowerSupportIndicator
                                                                                 CRITICALITY ignore
                                                                                                                        EXTENSION
                                                                                                                                    Reference-
                                                PRESENCE optional } |
ReceivedTotalWideBandPowerSupportIndicator
    { ID id-Reference-ReceivedTotalWideBandPower
                                                                                 CRITICALITY ignore
                                                                                                                        EXTENSION
                                                                                                                                    Reference-
ReceivedTotalWideBandPower
                                                PRESENCE optional },
CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
                                                         Cell-CM-Rsp,
    rACH
                                                         RACH-CM-Rsp,
    notUsed-cPCH
                                                         NULL,
    extension-CommonMeasurementObjectType-CM-Rsp
                                                         Extension-CommonMeasurementObjectType-CM-Rsp
Extension-CommonMeasurementObjectType-CM-Rsp ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RspIE }}
Extension-CommonMeasurementObjectType-CM-RspIE NBAP-PROTOCOL-IES ::= {
      ID id-Power-Local-Cell-Group-choice-CM-Rsp
                                                    CRITICALITY ignore
                                                                             TYPE PowerLocalCellGroup-CM-Rsp
                                                                                                                      PRESENCE mandatory } |
     ID id-ERACH-CM-Rsp
                                                    CRITICALITY ignore
                                                                             TYPE ERACH-CM-Rsp
                                                                                                                     PRESENCE mandatory }
        -- FDD only
ERACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue
                                    CommonMeasurementValue,
    iE-Extensions
                                    ProtocolExtensionContainer { { ERACHItem-CM-Rsp-ExtIEs} } OPTIONAL,
```

```
ERACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-CM-Rsp ::= SEQUENCE {
                                   CommonMeasurementValue,
   commonMeasurementValue
   iE-Extensions
                                  ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs} }
                                                                                                                OPTIONAL,
    . . .
CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-AdditionalMeasurementValueList
                                              CRITICALITY ignore EXTENSION Additional Measurement Value List
                                                                                                                PRESENCE optional },
    . . .
RACH-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                                   CommonMeasurementValue,
                                   ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL,
RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerLocalCellGroup-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                                  CommonMeasurementValue,
   iE-Extensions
                                   ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rsp-ExtIEs}}
                                                                                                                   OPTIONAL,
    . . .
PowerLocalCellGroup-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- COMMON MEASUREMENT INITIATION FAILURE
CommonMeasurementInitiationFailure ::= SEQUENCE {
   protocolIEs
                 ProtocolIE-Container
                                                       {{CommonMeasurementInitiationFailure-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}}
                                                                                                                   OPTIONAL,
CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                      CRITICALITY ignore
                                                                                                                PRESENCE mandatory
                                                                  TYPE MeasurementID
    { ID id-Cause
                                      CRITICALITY ignore
                                                                  TYPE Cause
                                                                                                                PRESENCE mandatory
```

```
{ ID id-CriticalityDiagnostics
                                                                   TYPE CriticalityDiagnostics
                                                                                                                   PRESENCE optional },
                                       CRITICALITY ignore
CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT REPORT
__ **********************
CommonMeasurementReport ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{CommonMeasurementReport-IEs}},
                                                       {{CommonMeasurementReport-Extensions}}
                           ProtocolExtensionContainer
    protocolExtensions
                                                                                                                   OPTIONAL,
CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                                   CRITICALITY ignore
                                                                           TYPE MeasurementID
                                                                                                                        PRESENCE mandatory
     ID id-CommonMeasurementObjectType-CM-Rprt
                                                                           TYPE CommonMeasurementObjectType-CM-Rprt
                                                   CRITICALITY ignore
                                                                                                                        PRESENCE mandatory
                                                   CRITICALITY ignore
     ID id-SFN
                                                                           TYPE SFN
                                                                                                                        PRESENCE optional }.
CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-MeasurementRecoveryReportingIndicator
                                                   CRITICALITY ignore
                                                                           EXTENSION MeasurementRecoveryReportingIndicator
                                                                                                                              PRESENCE optional }
     ID id-Reference-ReceivedTotalWideBandPower
                                                   CRITICALITY ignore
                                                                           EXTENSION Reference-ReceivedTotalWideBandPower
                                                                                                                              PRESENCE optional },
    . . .
CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
    cell
                                                       Cell-CM-Rprt,
    rACH
                                                       RACH-CM-Rprt,
    notUsed-cPCH
                                                       NULL.
    extension-CommonMeasurementObjectType-CM-Rprt
                                                       Extension-CommonMeasurementObjectType-CM-Rprt
Extension-CommonMeasurementObjectType-CM-Rprt ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RprtIE }}
Extension-CommonMeasurementObjectType-CM-RprtIE NBAP-PROTOCOL-IES ::= {
     ID id-Power-Local-Cell-Group-choice-CM-Rprt CRITICALITY ignore
                                                                           TYPE PowerLocalCellGroup-CM-Rprt
                                                                                                                   PRESENCE mandatory } |
                                                   CRITICALITY ignore
     ID id-ERACH-CM-Rprt
                                                                           TYPE ERACH-CM-Rprt
                                                                                                                   PRESENCE mandatory },
    . . .
ERACH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation
                                       CommonMeasurementValueInformation,
                                       ProtocolExtensionContainer {{ ERACHItem-CM-Rprt-ExtIEs }} OPTIONAL,
    iE-Extensions
```

```
ERACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation
                                  CommonMeasurementValueInformation,
   iE-Extensions
                                    ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}
                                                                                                          OPTIONAL,
CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-C-ID
                                       CRITICALITY ignore
                                                             EXTENSION C-ID
                                                                                      PRESENCE optional } |
   EXTENSION AdditionalMeasurementValueList
                                                                                                        PRESENCE optional },
RACH-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
   iE-Extensions
                                    OPTIONAL,
   . . .
RACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-C-ID
                     CRITICALITY ignore
                                              EXTENSION C-ID
                                                                        PRESENCE optional },
   . . .
PowerLocalCellGroup-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
                                    ProtocolExtensionContainer {{ PowerLocalCellGroup-CM-Rprt-ExtIEs}}
   iE-Extensions
                                                                                                        OPTIONAL,
   . . .
PowerLocalCellGroup-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT TERMINATION REQUEST
CommonMeasurementTerminationRequest ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                  {{CommonMeasurementTerminationRequest-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}
                                                                                                          OPTIONAL,
CommonMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-MeasurementID
                                CRITICALITY ignore
                                                             TYPE MeasurementID
                                                                                      PRESENCE mandatory },
   . . .
```

```
CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT FAILURE INDICATION
__ ********************
CommonMeasurementFailureIndication ::= SEQUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                         {CommonMeasurementFailureIndication-IEs}},
   protocolExtensions
                             ProtocolExtensionContainer
                                                       {{CommonMeasurementFailureIndication-Extensions}}
                                                                                                                   OPTIONAL,
CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                 CRITICALITY ignore
                                                                                     PRESENCE mandatory } |
                                                           TYPE MeasurementID
    { ID id-Cause
                                 CRITICALITY ignore
                                                           TYPE Cause
                                                                                     PRESENCE mandatory },
   . . .
CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
  CELL SETUP REQUEST FDD
     *******************
CellSetupRequestFDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{CellSetupRequestFDD-IEs}},
                         ProtocolExtensionContainer {{CellSetupRequestFDD-Extensions}}
   protocolExtensions
                                                                                         OPTIONAL,
CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-ID
                                                           CRITICALITY reject TYPE Local-Cell-ID
                                                                                                                      PRESENCE mandatory
     ID id-C-ID
                                                           CRITICALITY reject TYPE C-ID
                                                                                                                      PRESENCE mandatory
    { ID id-ConfigurationGenerationID
                                                           CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                      PRESENCE mandatory
    ID id-T-Cell
                                                           CRITICALITY reject TYPE T-Cell
                                                                                                                      PRESENCE mandatory
} |
    ID id-UARFCNforNu
                                                           CRITICALITY reject TYPE UARFON
                                                                                                                      PRESENCE mandatory
     ID id-UARFCNforNd
                                                           CRITICALITY reject TYPE UARFON
                                                                                                                      PRESENCE mandatory
```

```
{ ID id-MaximumTransmissionPower
                                                                 CRITICALITY reject TYPE MaximumTransmissionPower
                                                                                                                                 PRESENCE mandatory
} |
      ID id-Closed-Loop-Timing-Adjustment-Mode
                                                                 CRITICALITY reject TYPE Closedlooptimingadjustmentmode
                                                                                                                                 PRESENCE optional }|
     ID id-PrimaryScramblingCode
                                                                 CRITICALITY reject TYPE PrimaryScramblingCode
                                                                                                                                 PRESENCE mandatory
} |
    { ID id-Synchronisation-Configuration-Cell-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-SetupRgstFDD
                                                                 CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-SetupRqstFDD
                                                                                                                                             PRESENCE
    mandatory } |
    { ID id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD
                                                                CRITICALITY reject TYPE SecondaryCPICH-InformationList-Cell-SetupRgstFDD
                                                                                                                                            PRESENCE
    optional }|
    { ID id-PrimaryCCPCH-Information-Cell-SetupRgstFDD
                                                                 CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-SetupRqstFDD
                                                                                                                                             PRESENCE
    mandatory } |
    { ID id-Limited-power-increase-information-Cell-SetupRqstFDD
                                                                     CRITICALITY reject TYPE Limited-power-increase-information-Cell-SetupRqstFDD
        PRESENCE mandatory },
    . . .
CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::=
    { ID id-IPDLParameter-Information-Cell-SetupRgstFDD
                                                             CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-SetupRqstFDD
    PRESENCE optional } |
    { ID id-CellPortion-InformationList-Cell-SetupRgstFDD
                                                            CRITICALITY reject EXTENSION CellPortion-InformationList-Cell-SetupRgstFDD
    PRESENCE optional } |
    { ID id-MIMO-PilotConfiguration
                                                             CRITICALITY reject EXTENSION MIMO-PilotConfiguration
                                                                                                                           PRESENCE optional },
    . . .
Synchronisation-Configuration-Cell-SetupRqst ::= 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,
                                            ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                    OPTIONAL,
PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    secondarySCH-Power
                                            DL-Power,
    tSTD-Indicator
                                            TSTD-Indicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} }
SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    primaryCPICH-Power
                                            PrimaryCPICH-Power,
    transmitDiversityIndicator
                                            TransmitDiversityIndicator,
                                            ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
    . . .
PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondaryCPICH-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ SecondaryCPICH-
InformationItemIE-Cell-SetupRgstFDD }}
SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-SecondaryCPICH-InformationItem-Cell-SetupRgstFDD
                                                                    CRITICALITY reject TYPE SecondaryCPICH-InformationItem-Cell-SetupRqstFDD
    PRESENCE mandatory }
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    dl-ScramblingCode
                                            DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber,
    secondaryCPICH-Power
                                            DL-Power,
    transmitDiversityIndicator
                                            TransmitDiversityIndicator,
                                            ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
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
```

```
. . .
PrimaryCCPCH-Information-Cell-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                         CommonTransportChannelID,
   bCH-Power
                                         DL-Power,
   iE-Extensions
                                         ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} }
                                                                                                                  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-SetupRgstFDD-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-SetupRgstFDD-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-SetupRgstFDD::= SEQUENCE
   cellPortionID
                                         CellPortionID,
   associatedSecondaryCPICH
                                         CommonPhysicalChannelID,
   maximumTransmissionPowerforCellPortion MaximumTransmissionPower,
   iE-Extensions
                                         ProtocolExtensionContainer { { CellPortion-InformationItem-Cell-SetupRqstFDD-ExtIEs} }
```

```
CellPortion-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- CELL SETUP REOUEST 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
                                                          CRITICALITY reject TYPE C-ID
                                                                                                                           PRESENCE mandatory
    { ID id-ConfigurationGenerationID
                                                          CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                           PRESENCE mandatory
} |
                                                          CRITICALITY reject TYPE UARFON
    { ID id-UARFCNforNt
                                                                                                                           PRESENCE mandatory
} -- For 1.28Mcps TDD, if multiple frequencies exist within the cell indicated by C-ID, this IE indicates the frequency of Primary frequency
    { ID id-CellParameterID
                                                                                                                           PRESENCE mandatory
                                                          CRITICALITY reject TYPE CellParameterID
} |
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE indicate the Preamble code used in the Speial Time Slot [19]
    { ID id-MaximumTransmissionPower
                                                          CRITICALITY reject TYPE MaximumTransmissionPower
                                                                                                                           PRESENCE mandatory
} |
     ID id-TransmissionDiversityApplied
                                                          CRITICALITY reject TYPE TransmissionDiversityApplied
                                                                                                                           PRESENCE mandatory
} |
    ID id-SyncCase
                                                          CRITICALITY reject TYPE SyncCase
                                                                                                                           PRESENCE mandatory
} |
    { ID id-Synchronisation-Configuration-Cell-SetupRgst
                                                          CRITICALITY reject TYPE Synchronisation-Configuration-Cell-SetupRqst PRESENCE
mandatory }
    { ID id-DPCHConstant
                                                          CRITICALITY reject TYPE ConstantValue
                                                                                                                           PRESENCE mandatory
} -- This IE shall be ignored by the Node B.
    { ID id-PUSCHConstant
                                                          CRITICALITY reject TYPE ConstantValue
                                                                                                                           PRESENCE mandatory
} -- This IE shall be ignored by the Node B.
    { ID id-PRACHConstant
                                                          CRITICALITY reject TYPE ConstantValue
                                                                                                                           PRESENCE mandatory
} -- This IE shall be ignored by the Node B.
   { ID id-TimingAdvanceApplied
                                                          CRITICALITY reject TYPE TimingAdvanceApplied
                                                                                                                           PRESENCE mandatory
} |
    { ID id-SCH-Information-Cell-SetupRqstTDD
                                                          CRITICALITY reject TYPE SCH-Information-Cell-SetupRqstTDD
                                                                                                                           PRESENCE optional } |
    -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
   { ID id-PCCPCH-Information-Cell-SetupRgstTDD
                                                          CRITICALITY reject TYPE PCCPCH-Information-Cell-SetupRgstTDD
                                                                                                                           PRESENCE optional }
    -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
    { ID id-TimeSlotConfigurationList-Cell-SetupRqstTDD
                                                          CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-SetupRqstTDD PRESENCE optional
}, -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
```

```
CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotConfigurationList-LCR-Cell-SetupRgstTDD
                                                             CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD
    PRESENCE optional } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. If multiple frequencies exist within the
cell indicated by C-ID, this IE indicates the Time Slot configuration of Primary frequency.
    { ID id-PCCPCH-LCR-Information-Cell-SetupRqstTDD
                                                             CRITICALITY reject EXTENSION PCCPCH-LCR-Information-Cell-SetupRqstTDD
    PRESENCE optional } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD, For 1.28 Mcps TDD, if the cell is
operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special Time Slot [19].
                                                             CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-SetupRqstTDD
    { ID id-DwPCH-LCR-Information-Cell-SetupRgstTDD
    PRESENCE optional }
                        -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-ReferenceSFNoffset
                                                             CRITICALITY ignore EXTENSION ReferenceSFNoffset
    PRESENCE optional }
    { ID id-IPDLParameter-Information-Cell-SetupRgstTDD
                                                             CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-SetupRgstTDD
    PRESENCE optional }
                         -- Applicable to 3.84Mcps TDD and 7.68Mcps 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
    { ID id-PCCPCH-768-Information-Cell-SetupRgstTDD
                                                             CRITICALITY reject EXTENSION PCCPCH-768-Information-Cell-SetupRgstTDD
                         -- Mandatory for 7.68Mcps TDD, Not Applicable to 3.84Mcps TDD or 1.28Mcps TDD
    PRESENCE optional }
    { ID id-SCH-768-Information-Cell-SetupRgstTDD
                                                             CRITICALITY reject EXTENSION SCH-768-Information-Cell-SetupRgstTDD
    PRESENCE optional } |
                         -- Mandatory for 7.68Mcps TDD, Not Applicable to 3.84Mcps TDD or 1.28Mcps TDD
    { ID id-MBSFN-Only-Mode-Indicator-Cell-SetupRgstTDD-LCR
                                                             CRITICALITY reject EXTENSION MBSFN-Only-Mode-Indicator
    PRESENCE optional }
    { ID id-Cell-Frequency-List-LCR-MulFreq-Cell-SetupRastTDD CRITICALITY reject EXTENSION Cell-Frequency-List-LCR-MulFreq-Cell-SetupRastTDD
    PRESENCE optional }, -- Mandatory for 1.28Mcps TDD when using multiple frequencies
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-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
SyncCaseIndicator-Cell-SetupRqstTDD-PSCH ::= ProtocolIE-Single-Container {{ SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH }}
SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH NBAP-PROTOCOL-IES ::= {
    PRESENCE
mandatory }
SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE
    case1
                                      Case1-Cell-SetupRgstTDD,
    case2
                                      Case2-Cell-SetupRqstTDD,
```

```
Case1-Cell-SetupRqstTDD ::= SEQUENCE {
         timeSlot
                                                                                      TimeSlot.
         iE-Extensions
                                                                                      OPTIONAL.
Case1Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Case2-Cell-SetupRqstTDD ::= SEQUENCE {
         sCH-TimeSlot
                                                                                      SCH-TimeSlot,
         iE-Extensions
                                                                                      OPTIONAL,
Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
         commonPhysicalChannelID
                                                                                               CommonPhysicalChannelID,
         tdd-PhysicalChannelOffset
                                                                                               TDD-PhysicalChannelOffset,
         repetitionPeriod
                                                                                               RepetitionPeriod,
         repetitionLength
                                                                                               RepetitionLength,
         pCCPCH-Power
                                                                                               PCCPCH-Power,
         sCTD-Indicator
                                                                                               SCTD-Indicator,
         iE-Extensions
                                                                                               ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRgstTDD-ExtIEs} }
                                                                                                                                                                                                                                                                           OPTIONAL,
PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD
TimeSlotConfigurationItem-Cell-SetupRgstTDD ::= SEQUENCE {
         timeSlot
                                                                                              TimeSlot,
         timeSlotStatus
                                                                                               TimeSlotStatus,
         timeSlotDirection
                                                                                              TimeSlotDirection,
                                                                                               ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs} }
         iE-Extensions
                                                                                                                                                                                                                                                                                               OPTIONAL,
{\tt TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs\ NBAP-PROTOCOL-EXTENSION\ ::=\ \{log_{total}\}{\tt TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs\ ::=\ \{log_{total}\}{\tt TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs\ ::=\ \{log_{total}\}{\tt TimeSlotConfigurationItem-Cell-Se
         { ID id-MBSFN-Cell-ParameterID-Cell-SetupRgstTDD
                                                                                                                                         CRITICALITY reject EXTENSION CellParameterID
                                                                                                                                                                                                                                                               PRESENCE optional \ . --
Applicable only to for MBSFN only mode
TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
```

```
timeSlotLCR
                                            TimeSlotLCR,
    timeSlotStatus
                                            TimeSlotStatus.
    timeSlotDirection
                                            TimeSlotDirection.
    iE-Extensions
                                            ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                          OPTIONAL,
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Time-Slot-Parameter-ID
                                                             CRITICALITY reject
                                                                                          EXTENSION CellParameterID
                                                                                                                               PRESENCE optional },
    . . .
PCCPCH-LCR-Information-Cell-SetupRgstTDD ::= SEQUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    pCCPCH-Power
                                            PCCPCH-Power,
                                            SCTD-Indicator,
    sCTD-Indicator
    tSTD-Indicator
                                            TSTD-Indicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                    OPTIONAL.
    . . .
PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-LCR-Information-Cell-SetupRgstTDD ::= SEQUENCE {
    commonPhysicalChannelId
                                    CommonPhysicalChannelID,
    tSTD-Indicator
                                    TSTD-Indicator,
    dwPCH-Power
                                    DwPCH-Power,
    iE-Extensions
                                    ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                           OPTIONAL,
DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    iPDL-TDD-Parameters
                                            IPDL-TDD-Parameters,
    iPDL-Indicator
                                            IPDL-Indicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                       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,
```

```
ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
IPDLParameter-Information-LCR-Cell-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-768-Information-Cell-SetupRqstTDD ::= SEQUENCE
    commonPhysicalChannelID768
                                         CommonPhysicalChannelID768,
    tdd-PhysicalChannelOffset
                                         TDD-PhysicalChannelOffset,
    repetitionPeriod
                                         RepetitionPeriod,
    repetitionLength
                                         RepetitionLength,
   pCCPCH-Power
                                         PCCPCH-Power,
    sCTD-Indicator
                                         SCTD-Indicator,
   iE-Extensions
                                         ProtocolExtensionContainer { { PCCPCH-768-Information-Cell-SetupRgstTDD-ExtIEs} }
                                                                                                                           OPTIONAL,
    . . .
PCCPCH-768-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SCH-768-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                         CommonPhysicalChannelID768,
    syncCaseIndicator
                                         SyncCaseIndicator-Cell-SetupRqstTDD-PSCH,
    sCH-Power
                                         DL-Power,
    tSTD-Indicator
                                         TSTD-Indicator,
                                         iE-Extensions
                                                                                                                        OPTIONAL,
SCH-768-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF Cell-Frequency-Item-LCR-MulFreq-Cell-
SetupRastTDD
Cell-Frequency-Item-LCR-MulFreq-Cell-SetupRqstTDD ::= SEQUENCE
                                                         UARFCN,
    -- This IE indicates the frequency of Secondary frequency
    timeSlotConfigurationList-LCR-Cell-SetupRqstTDD
                                                        TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
    -- This IE indicates the Time Slot configuration of Secondary frequency
   iE-Extensions
                                         ProtocolExtensionContainer { { Cell-Frequency-Item-LCR-MulFreq-Cell-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
Cell-Frequency-Item-LCR-MulFreq-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ **********************
```

```
-- CELL SETUP RESPONSE
__ ********************
CellSetupResponse ::= SEQUENCE {
                                                       {{CellSetupResponse-IEs}},
   protocolIEs
                             ProtocolIE-Container
                             ProtocolExtensionContainer {{CellSetupResponse-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                    CRITICALITY ignore
                                                              TYPE CriticalityDiagnostics
                                                                                                         PRESENCE optional },
CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- CELL SETUP FAILURE
__ *********************
CellSetupFailure ::= SEQUENCE {
                                                   {{CellSetupFailure-IEs}},
   protocolIEs
                        ProtocolIE-Container
                         ProtocolExtensionContainer {{CellSetupFailure-Extensions}}
   protocolExtensions
                                                                                       OPTIONAL,
CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                       CRITICALITY ignore
                                                                                                            PRESENCE mandatory } |
                                                                 TYPE Cause
   { ID id-CriticalityDiagnostics
                                                                                                            PRESENCE optional },
                                       CRITICALITY ignore
                                                                 TYPE CriticalityDiagnostics
   . . .
CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  CELL RECONFIGURATION REQUEST FDD
    *************
CellReconfigurationRequestFDD ::= SEQUENCE {
   protocolIEs
                                                   {{CellReconfigurationRequestFDD-IEs}},
                        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 id-MaximumTransmissionPower
                                                               CRITICALITY reject TYPE MaximumTransmissionPower
   PRESENCE optional } |
          id-Synchronisation-Configuration-Cell-ReconfRqst
                                                               CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRqst
   PRESENCE optional } |
   { ID id-PrimarySCH-Information-Cell-ReconfRqstFDD
                                                               CRITICALITY reject TYPE PrimarySCH-Information-Cell-ReconfRqstFDD
   PRESENCE optional }
          id-SecondarySCH-Information-Cell-ReconfRqstFDD
                                                               CRITICALITY reject TYPE SecondarySCH-Information-Cell-ReconfRqstFDD
   PRESENCE optional } |
          id-PrimaryCPICH-Information-Cell-ReconfRgstFDD
                                                               CRITICALITY reject TYPE PrimaryCPICH-Information-Cell-ReconfRqstFDD
   PRESENCE optional }
          id-SecondaryCPICH-InformationList-Cell-ReconfRgstFDD
                                                               CRITICALITY reject TYPE SecondaryCPICH-InformationList-Cell-ReconfRqstFDD
   PRESENCE optional } |
    { ID id-PrimaryCCPCH-Information-Cell-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 }
   PRESENCE optional } |
   { ID id-MIMO-PilotConfiguration
                                                        CRITICALITY reject EXTENSION MIMO-PilotConfiguration
   PRESENCE optional },
Synchronisation-Configuration-Cell-ReconfRqst ::= SEQUENCE {
   n-INSYNC-IND
                         N-INSYNC-IND,
   n-OUTSYNC-IND
                         N-OUTSYNC-IND,
   t-RLFAILURE
                         T-RLFAILURE,
   iE-Extensions
                         ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs} }
                                                                                                              OPTIONAL,
Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimarySCH-Information-Cell-ReconfRgstFDD ::= SEOUENCE {
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   primarvSCH-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-ReconfRgstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                           CommonPhysicalChannelID,
    primaryCPICH-Power
                                           PrimaryCPICH-Power,
    iE-Extensions
                                            ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRgstFDD-ExtIEs} }
                                                                                                                                     OPTIONAL,
PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondaryCPICH-InformationList-Cell-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ SecondaryCPICH-
InformationItemIE-Cell-ReconfRqstFDD }}
SecondaryCPICH-InformationItemIE-Cell-ReconfRgstFDD NBAP-PROTOCOL-IES ::= {
          id-SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD CRITICALITY reject TYPE
                                                                                                SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD
        PRESENCE mandatory }
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                           CommonPhysicalChannelID,
    secondaryCPICH-Power
                                           DL-Power,
                                           ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    bCH-information
                                            BCH-information-Cell-ReconfRgstFDD,
    iE-Extensions
                                            ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                                     OPTIONAL,
PrimaryCCPCH-Information-Cell-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCH-information-Cell-ReconfRqstFDD ::= SEQUENCE {
```

```
CommonTransportChannelID,
   commonTransportChannelID
   bCH-Power
                                      DL-Power,
   iE-Extensions
                                      OPTIONAL.
BCH-information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-Cell-ReconfRqstFDD::= SEQUENCE {
   iPDL-FDD-Parameters
                                         IPDL-FDD-Parameters
                                                              OPTIONAL,
   iPDL-Indicator
                                         IPDL-Indicator,
   iE-Extensions
                                      ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                   OPTIONAL,
IPDLParameter-Information-Cell-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellPortion-InformationList-Cell-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF ProtocolIE-Single-Container{{ CellPortion-
InformationItemIE-Cell-ReconfRqstFDD }}
CellPortion-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE
             mandatory}
CellPortion-InformationItem-Cell-ReconfRqstFDD::= SEQUENCE {
   cellPortionID
                                      CellPortionID,
   maximumTransmissionPowerforCellPortion MaximumTransmissionPower,
   iE-Extensions
                                      ProtocolExtensionContainer { { CellPortion-InformationItem-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                      OPTIONAL,
CellPortion-InformationItem-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  CELL RECONFIGURATION REQUEST TDD
  *********************
CellReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                 {{CellReconfigurationRequestTDD-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer
                                               {{CellReconfigurationRequestTDD-Extensions}}
                                                                                                       OPTIONAL,
CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                                                    CRITICALITY reject TYPE C-ID
                                                                                                            PRESENCE mandatory } |
```

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```
ID id-ConfigurationGenerationID
                                                          CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                        PRESENCE mandatory } |
     ID id-Synchronisation-Configuration-Cell-ReconfRgst
                                                         CRITICALITY reject TYPE Synchronisation-Configuration-Cell-ReconfRgst
                                                                                                                               PRESENCE
optional }|
     ID id-TimingAdvanceApplied
                                                          CRITICALITY reject TYPE TimingAdvanceApplied
                                                                                                                        PRESENCE optional }
    { ID id-SCH-Information-Cell-ReconfRqstTDD
                                                          CRITICALITY reject TYPE SCH-Information-Cell-ReconfRqstTDD
                                                                                                                        PRESENCE optional }
    -- Applicable to 3.84Mcps TDD only
    { ID id-PCCPCH-Information-Cell-ReconfRqstTDD
                                                          CRITICALITY reject TYPE PCCPCH-Information-Cell-ReconfRqstTDD PRESENCE optional }
    -- Not applicable to 7.68Mcps TDD only. For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, PCCPCH is deployed on the MBSFN Special
Time Slot [19].
    { ID id-MaximumTransmissionPower
                                                          CRITICALITY reject TYPE MaximumTransmissionPower
                                                                                                                        PRESENCE optional }
    { ID id-DPCHConstant
                                                          CRITICALITY reject TYPE ConstantValue
                                                                                                                        PRESENCE optional }
   -- This IE shall be ignored by the Node B.
    { ID id-PUSCHConstant
                                                          CRITICALITY reject TYPE ConstantValue
                                                                                                                        PRESENCE optional } |
    -- This IE shall be ignored by the Node B.
   { ID id-PRACHConstant
                                                          CRITICALITY reject TYPE ConstantValue
                                                                                                                        PRESENCE optional } |
    -- This IE shall be ignored by the Node B.
    { ID id-TimeSlotConfigurationList-Cell-ReconfRgstTDD
                                                         CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-ReconfRgstTDD
                                                                                                                                 PRESENCE
optional },
    -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD only. Not Applicable to 1.28Mcps TDD.
CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ID id-TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD
    PRESENCE optional }
                         -- Applicable to 1.28Mcps TDD only, If multiple frequencies exist within the cell indicated by C-ID, this IE indicates
the Time Slot reconfiguration of Primary frequency
    { ID id-DwPCH-LCR-Information-Cell-ReconfRgstTDD
                                                              CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-ReconfRqstTDD
    PRESENCE optional }
                         -- Applicable to 1.28Mcps TDD only
          id-IPDLParameter-Information-Cell-ReconfRgstTDD
                                                              CRITICALITY reject EXTENSION IPDLParameter-Information-Cell-ReconfRgstTDD
    PRESENCE optional } -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
    { ID id-IPDLParameter-Information-LCR-Cell-ReconfRgstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-LCR-Cell-ReconfRgstTDD
    PRESENCE optional } |
                          -- Applicable to 1.28Mcps TDD only
    { ID id-SCH-768-Information-Cell-ReconfRqstTDD
                                                              CRITICALITY reject EXTENSION SCH-768-Information-Cell-ReconfRqstTDD
    PRESENCE optional } -- Applicable to 7.68Mcps TDD only
    { ID id-PCCPCH-768-Information-Cell-ReconfRgstTDD
                                                              CRITICALITY reject EXTENSION PCCPCH-768-Information-Cell-ReconfRgstTDD
    PRESENCE optional } -- Applicable to 7.68Mcps TDD only
    { ID id-UARFCN-Adjustment
                                                              CRITICALITY reject EXTENSION UARFCN-Adjustment
    PRESENCE optional },
                         -- Applicable to 1.28Mcps TDD when using multiple frequencies
SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                          CommonPhysicalChannelID,
    sCH-Power
                                          DL-Power,
                                          iE-Extensions
                                                                                                                        OPTIONAL,
PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                          CommonPhysicalChannelID,
```

```
pCCPCH-Power
                                        PCCPCH-Power,
   iE-Extensions
                                        OPTIONAL,
PCCPCH-Information-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD
TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
   timeSlot
                                        TimeSlot.
   timeSlotStatus
                                        TimeSlotStatus,
   timeSlotDirection
                                        TimeSlotDirection,
   iE-Extensions
                                        ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRgstTDD-ExtIEs} }
                                                                                                                          OPTIONAL,
   . . .
TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-MBSFN-Cell-ParameterID-Cell-ReconfRqstTDD
                                                          CRITICALITY reject EXTENSION CellParameterID
                                                                                                             PRESENCE optional },
   . . .
TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD
TimeSlotConfigurationItem-LCR-Cell-ReconfRgstTDD ::= SEQUENCE {
   timeSlotLCR
                                        TimeSlotLCR,
   timeSlotStatus
                                        TimeSlotStatus,
   timeSlotDirection
                                        TimeSlotDirection,
   iE-Extensions
                                        ProtocolExtensionContainer { TimeSlotConfigurationItem-LCR-Cell-ReconfRgstTDD-ExtIEs} } OPTIONAL,
TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE
   commonPhysicalChannelId
                                        CommonPhysicalChannelID,
   dwPCH-Power
                                        DwPCH-Power,
                                        iE-Extensions
                                                                                                                        OPTIONAL,
DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLParameter-Information-Cell-ReconfRgstTDD ::= SEQUENCE
   iPDL-TDD-Parameters
                                        IPDL-TDD-Parameters
                                                              OPTIONAL,
   iPDL-Indicator
                                        IPDL-Indicator,
   iE-Extensions
                                        ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs} }
                                                                                                                          OPTIONAL,
   . . .
```

```
IPDLParameter-Information-Cell-ReconfRgstTDD-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 ::= {
SCH-768-Information-Cell-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                          CommonPhysicalChannelID768,
   sCH-Power
                                          DL-Power,
   iE-Extensions
                                          OPTIONAL,
    . . .
PSCH-768-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-768-Information-Cell-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID768
                                          CommonPhysicalChannelID768,
    pCCPCH-Power
                                          PCCPCH-Power,
   iE-Extensions
                                          ProtocolExtensionContainer { { PCCPCH-768-Information-Cell-ReconfRqstTDD-ExtIEs} }
                                                                                                                              OPTIONAL,
    . . .
PCCPCH-768-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UARFCN-Adjustment::= CHOICE
    cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD
                                                                 Cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD,
    cell-Frequency-ModifyList-LCR-MulFreq-Cell-ReconfRqstTDD
                                                                 Cell-Frequency-ModifyList-LCR-MulFreq-Cell-ReconfRqstTDD,
    cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRqstTDD
                                                                 Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRqstTDD,
Cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD ::= SEQUENCE
                                                          UARFCN,
    -- This IE indicates the frequency of Secondary frequency to add
    timeSlotConfigurationList-LCR-Cell-ReconfRgstTDD
                                                          TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD,
    -- This IE indicates the Time Slot configuration of Secondary frequency to add
   iE-Extensions
                                          ProtocolExtensionContainer { Cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
```

```
Cell-Frequency-Add-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-Frequency-ModifyList-LCR-MulFreq-Cell-ReconfRgstTDD::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF Cell-Frequency-ModifyItem-LCR-MulFreq-
Cell-ReconfRqstTDD
Cell-Frequency-ModifyItem-LCR-MulFreq-Cell-ReconfRqstTDD ::= SEQUENCE
   uARFCN
   -- This IE indicates the frequency of Secondary frequency to modify
   timeSlotConfigurationList-LCR-Cell-ReconfRgstTDD
                                                        TimeSlotConfigurationList-LCR-Cell-ReconfRgstTDD,
   -- This IE indicates the Time Slot reconfiguration of Secondary frequency
                                         ProtocolExtensionContainer { { Cell-Frequency-ModifyItem-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
Cell-Frequency-ModifyItem-LCR-MulFreq-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRqstTDD ::= SEQUENCE {
   -- This IE indicates the frequency of Secondary Frequency to delete
                                         ProtocolExtensionContainer { { Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
Cell-Frequency-Delete-LCR-MulFreq-Cell-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
  CELL RECONFIGURATION RESPONSE
  CellReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                                                         {{CellReconfigurationResponse-IEs}},
                             ProtocolIE-Container
                              ProtocolExtensionContainer {{CellReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                                OPTIONAL,
CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                     CRITICALITY ignore
                                                                TYPE CriticalityDiagnostics
                                                                                                             PRESENCE optional },
   . . .
CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CELL RECONFIGURATION FAILURE
  ***********************
CellReconfigurationFailure ::= SEQUENCE {
                                              {{CellReconfigurationFailure-IEs}},
   protocolIEs
                      ProtocolIE-Container
                      ProtocolExtensionContainer
                                             {{CellReconfigurationFailure-Extensions}}
   protocolExtensions
                                                                                                 OPTIONAL,
   . . .
CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    ID id-Cause
                                CRITICALITY ignore
                                                       TYPE Cause
                                                                                                 PRESENCE mandatory } |
    ID id-CriticalityDiagnostics
                                CRITICALITY ignore
                                                       TYPE CriticalityDiagnostics
                                                                                                 PRESENCE optional },
CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    *****************
  CELL DELETION REQUEST
__ *********************
CellDeletionRequest ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                              {{CellDeletionRequest-IEs}},
   protocolExtensions
                      ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}
                                                                               OPTIONAL,
CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                      CRITICALITY reject
                                             TYPE C-ID
                                                           PRESENCE mandatory },
CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- CELL DELETION RESPONSE
  *****************
CellDeletionResponse ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                              {{CellDeletionResponse-IEs}},
                                             {{CellDeletionResponse-Extensions}}
   protocolExtensions
                      ProtocolExtensionContainer
                                                                               OPTIONAL,
```

```
CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                  CRITICALITY ignore
                                                          TYPE CriticalityDiagnostics
                                                                                                    PRESENCE optional },
CellDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RESOURCE STATUS INDICATION
····
ResourceStatusIndication ::= SEQUENCE {
                                                {{ResourceStatusIndication-IEs}},
   protocolIEs
                ProtocolIE-Container
   protocolExtensions
                     ProtocolExtensionContainer {{ResourceStatusIndication-Extensions}}
                                                                                                    OPTIONAL.
ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
     PRESENCE mandatory } |
   { ID id-Cause
                                         CRITICALITY ignore TYPE Cause
                                                                                                      PRESENCE optional },
   . . .
ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
IndicationType-ResourceStatusInd ::= CHOICE {
   no-Failure
                                     No-Failure-ResourceStatusInd,
   serviceImpacting
                                      ServiceImpacting-ResourceStatusInd,
No-Failure-ResourceStatusInd ::= SEQUENCE {
   local-Cell-InformationList
                                      Local-Cell-InformationList-ResourceStatusInd,
   local-Cell-Group-InformationList
                                      Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
                                      ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         id-Power-Local-Cell-Group-InformationList-ResourceStatusInd
                                                                 CRITICALITY
                                                                               ignore
                                                                                                         EXTENSION Power-Local-
Cell-Group-InformationList-ResourceStatusInd
                                        PRESENCE optional
```

```
Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE-ResourceStatusInd }}
Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
                                              Local-Cell-ID,
   local-CellID
    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-ID
   local-Cell-Group-ID
                                                                                        OPTIONAL,
    iE-Extensions
                                              ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID 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
                                              CRITICALITY ignore
                                                                     EXTENSION HSDPA-Capability
                                                                                                                     PRESENCE optional }
     TD
     ID id-E-DCH-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-Capability
                                                                                                                     PRESENCE optional }
          id-E-DCH-TTI2ms-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-TTI2ms-Capability
                                                                                                                     PRESENCE conditional } |
    { ID
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
          id-E-DCH-SF-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-SF-Capability
                                                                                                                     PRESENCE conditional }
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
           id-E-DCH-HARO-Combining-Capability
                                                         CRITICALITY ignore
                                                                                    EXTENSION E-DCH-HARO-Combining-Capability
                                                                                                                                   PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
           id-E-DCH-CapacityConsumptionLaw
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                  PRESENCE optional }
           id-F-DPCH-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION F-DPCH-Capability
                                                                                                                  PRESENCE optional }
           id-E-DCH-TDD-CapacityConsumptionLaw
     ID
                                                  CRITICALITY ignore
                                                                         EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                   PRESENCE optional }
           id-ContinuousPacketConnectivityDTX-DRX-Capability
                                                                     CRITICALITY ignore
ContinuousPacketConnectivityDTX-DRX-Capability
                                                      PRESENCE
                                                                 optional }|
           id-Max-UE-DTX-Cycle
                                                                     EXTENSION Max-UE-DTX-Cycle
                                              CRITICALITY ignore
                                                                                                                  PRESENCE conditional } |
    -- The IE shall be present if Continuous Packet Connectivity DTX-DRX Capability IE is present and set to 'Continuous Packet Connectivity DTX-
DRX Capable'.
          id-ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                     CRITICALITY ignore
     ID
                                                                                                               EXTENSION
ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                         PRESENCE
                                                                     optional }|
           id-MIMO-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION MIMO-Capability
                                                                                                                  PRESENCE optional }
           id-SixtyfourQAM-DL-Capability
                                                                                                                  PRESENCE optional }
    ID
                                              CRITICALITY ignore
                                                                     EXTENSION SixtyfourQAM-DL-Capability
```

```
id-MBMS-Capability
                                                                                                                  PRESENCE optional } |
                                              CRITICALITY ignore
                                                                     EXTENSION MBMS-Capability
     ID
           id-Enhanced-FACH-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION Enhanced-FACH-Capability
                                                                                                                  PRESENCE optional }
           id-Enhanced-PCH-Capability
                                              CRITICALITY ignore
                                                                                                                  PRESENCE conditional }
     ID
                                                                     EXTENSION Enhanced-PCH-Capability
    -- The IE shall be present if Enhanced FACH Capability IE is set to 'Enhanced FACH Capable'.
           id-SixteenOAM-UL-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION SixteenQAM-UL-Capability
                                                                                                                  PRESENCE optional
           id-HSDSCH-MACdPDU-SizeCapability
                                              CRITICALITY ignore
                                                                     EXTENSION HSDSCH-MACdPDU-SizeCapability
                                                                                                                  PRESENCE optional
     ID
           id-MBSFN-Only-Mode-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION MBSFN-Only-Mode-Capability
                                                                                                                  PRESENCE optional
     TD
                                              CRITICALITY ignore
     ID
           id-F-DPCH-SlotFormatCapability
                                                                     EXTENSION F-DPCH-SlotFormatCapability
                                                                                                                  PRESENCE optional
     TD
           id-E-DCH-MACdPDU-SizeCapability
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-MACdPDU-SizeCapability
                                                                                                                  PRESENCE optional
           id-Common-EDCH-Capability
                                              CRITICALITY ignore
                                                                     EXTENSION Common-EDCH-Capability
                                                                                                                  PRESENCE optional }
     TD
           id-E-AI-Capability
                                          CRITICALITY ignore
                                                                 EXTENSION E-AI-Capability
                                                                                                                PRESENCE optional } |
     TD
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
    { ID id-Enhanced-UE-DRX-Capability
                                               CRITICALITY ignore
                                                                     EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                  PRESENCE optional } |
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH'.
     ID id-Enhanced-UE-DRX-CapabilityLCR
                                               CRITICALITY ignore
                                                                     EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                  PRESENCE optional }
     ID id-E-DPCCH-Power-Boosting-Capability
                                               CRITICALITY ignore
                                                                     EXTENSION E-DPCCH-Power-Boosting-Capability
                                                                                                                  PRESENCE optional }
         id-SixtyfourOAM-DL-MIMO-Combined-Capability
                                                         CRITICALITY ignore
                                                                                 EXTENSION SixtyfourOAM-DL-MIMO-Combined-Capability
    PRESENCE
               conditional }
    { ID id-Multi-Cell-Capability-Info
                                                                                                                  PRESENCE optional }.
                                               CRITICALITY ignore
                                                                     EXTENSION Multi-Cell-Capability-Info
Local-Cell-Group-InformationList-ResourceStatusInd ::= SEOUENCE(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 ::= {
     ID id-E-DCH-CapacityConsumptionLaw
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                  PRESENCE optional } |
     ID id-E-DCH-TDD-CapacityConsumptionLaw
                                              CRITICALITY ignore
                                                                     EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                  PRESENCE optional }.
Power-Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-
Cell-Group-InformationItemIE-ResourceStatusInd }}
Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd
                                                                     CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-
ResourceStatusInd
                       PRESENCE mandatory }
```

```
Power-Local-Cell-Group-InformationItem-ResourceStatusInd::= SEQUENCE {
   power-Local-Cell-Group-ID
                                             Local-Cell-ID,
   maximumDL-PowerCapability
                                              MaximumDL-PowerCapability,
                                              ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} }
   iE-Extensions
   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,
                                          ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID 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 ::=
    mandatory }
Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
   local-Cell-ID
                                              Local-Cell-ID,
    dl-or-global-capacityCredit
                                              DL-or-Global-CapacityCredit
                                                                                    OPTIONAL,
    ul-capacityCredit
                                              UL-CapacityCredit
                                                                                    OPTIONAL,
    commonChannelsCapacityConsumptionLaw
                                              CommonChannelsCapacityConsumptionLaw
                                                                                    OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw
                                              DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    maximum-DL-PowerCapability
                                              MaximumDL-PowerCapability
                                                                                    OPTIONAL,
   minSpreadingFactor
                                              MinSpreadingFactor
                                                                                    OPTIONAL,
   minimumDL-PowerCapability
                                              MinimumDL-PowerCapability
                                                                                    OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs} }
Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID
          id-ReferenceClockAvailability
                                             CRITICALITY ignore
                                                                         EXTENSION ReferenceClockAvailability
                                                                                                                    PRESENCE optional }
     ID
           id-HSDPA-Capability
                                              CRITICALITY ignore
                                                                         EXTENSION HSDPA-Capability
                                                                                                                    PRESENCE optional }
           id-E-DCH-Capability
                                              CRITICALITY ignore
                                                                                                                    PRESENCE optional }
     ID
                                                                         EXTENSION E-DCH-Capability
```

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PRESENCE conditional } |
           id-E-DCH-TTI2ms-Capability
                                               CRITICALITY ignore
                                                                          EXTENSION E-DCH-TTI2ms-Capability
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
    { ID id-E-DCH-SF-Capability
                                              CRITICALITY ignore
                                                                          EXTENSION E-DCH-SF-Capability
                                                                                                                      PRESENCE conditional }
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
           id-E-DCH-HARO-Combining-Capability
                                                          CRITICALITY ignore
                                                                                      EXTENSION E-DCH-HARO-Combining-Capability
                                                                                                                                     PRESENCE
    conditional }|
    -- The IE shall be present if E-DCH Capability IE is set to 'E-DCH Capable'.
           id-E-DCH-CapacityConsumptionLaw
                                              CRITICALITY ignore
                                                                          EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                                       PRESENCE optional }
     TD
           id-F-DPCH-Capability
                                               CRITICALITY ignore
                                                                          EXTENSION F-DPCH-Capability
                                                                                                                       PRESENCE optional
           id-E-DCH-TDD-CapacityConsumptionLaw
                                                   CRITICALITY ignore
                                                                          EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                                      PRESENCE optional }
     TD
           id-ContinuousPacketConnectivityDTX-DRX-Capability
                                                                                                                 EXTENSION
                                                                      CRITICALITY ignore
ContinuousPacketConnectivityDTX-DRX-Capability
                                                       PRESENCE
                                                                  optional }
           id-Max-UE-DTX-Cycle
                                               CRITICALITY ignore
                                                                          EXTENSION Max-UE-DTX-Cycle
                                                                                                                       PRESENCE conditional } |
    -- The IE shall be present if Continuous Packet Connectivity DTX-DRX Capability IE is present and set to 'Continuous Packet Connectivity DTX-
DRX Capable'.
     ID
           id-ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                                      CRITICALITY ignore
                                                                                                                 EXTENSION
ContinuousPacketConnectivityHS-SCCH-less-Capability
                                                          PRESENCE
                                                                      optional }|
           id-MIMO-Capability
                                                                      EXTENSION MIMO-Capability
                                              CRITICALITY ignore
                                                                                                                      PRESENCE optional }
           id-SixtyfourQAM-DL-Capability
                                                                      EXTENSION SixtyfourQAM-DL-Capability
                                                                                                                      PRESENCE optional }
                                              CRITICALITY ignore
           id-MBMS-Capability
                                                                      EXTENSION MBMS-Capability
                                                                                                                      PRESENCE optional }
     TD
                                               CRITICALITY ignore
           id-Enhanced-FACH-Capability
     TD
                                               CRITICALITY ignore
                                                                      EXTENSION Enhanced-FACH-Capability
                                                                                                                      PRESENCE optional }
           id-Enhanced-PCH-Capability
                                               CRITICALITY ignore
                                                                      EXTENSION Enhanced-PCH-Capability
                                                                                                                      PRESENCE conditional } |
     ID
    -- The IE shall be present if Enhanced FACH Capability IE is set to 'Enhanced FACH Capable'.
                                               CRITICALITY ignore
                                                                      EXTENSION SixteenOAM-UL-Capability
           id-SixteenQAM-UL-Capability
                                                                                                                      PRESENCE optional
                                                                      EXTENSION HSDSCH-MACdPDU-SizeCapability
                                                                                                                      PRESENCE optional }
           id-HSDSCH-MACdPDU-SizeCapability
                                              CRITICALITY ignore
           id-MBSFN-Only-Mode-Capability
                                               CRITICALITY ignore
                                                                      EXTENSION MBSFN-Only-Mode-Capability
                                                                                                                      PRESENCE optional
           id-F-DPCH-SlotFormatCapability
                                               CRITICALITY ignore
                                                                      EXTENSION F-DPCH-SlotFormatCapability
                                                                                                                      PRESENCE optional
     ID id-E-DCH-MACdPDU-SizeCapability
                                               CRITICALITY ignore
                                                                      EXTENSION E-DCH-MACdPDU-SizeCapability
                                                                                                                      PRESENCE optional }
           id-Common-EDCH-Capability
                                                                      EXTENSION Common-EDCH-Capability
                                                                                                                      PRESENCE optional }
                                               CRITICALITY ignore
           id-E-AI-Capability
                                                                  EXTENSION E-AI-Capability
                                                                                                                    PRESENCE optional } |
     ID
                                           CRITICALITY ignore
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
           id-Enhanced-UE-DRX-Capability
                                                CRITICALITY ignore
                                                                      EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                       PRESENCE optional } |
    -- The IE shall be present if Common E-DCH Capability IE is present and set to 'Common E-DCH Capable'.
           id-Enhanced-UE-DRX-CapabilityLCR
                                              CRITICALITY ignore
                                                                      EXTENSION Enhanced-UE-DRX-Capability
                                                                                                                       PRESENCE optional } |
           id-E-DPCCH-Power-Boosting-Capability
                                                       CRITICALITY ignore
    { ID
                                                                              EXTENSION E-DPCCH-Power-Boosting-Capability
    PRESENCE
               optional }|
           id-SixtyfourQAM-DL-MIMO-Combined-Capability
                                                          CRITICALITY ignore
                                                                                  EXTENSION SixtyfourQAM-DL-MIMO-Combined-Capability
               conditional }|
    PRESENCE
           id-Multi-Cell-Capability-Info
   { ID
                                               CRITICALITY ignore
                                                                      EXTENSION Multi-Cell-Capability-Info
                                                                                                                      PRESENCE optional },
    . . .
Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(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,
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commonChannelsCapacityConsumptionLaw
                                           CommonChannelsCapacityConsumptionLaw
                                                                                  OPTIONAL,
   dedicatedChannelsCapacityConsumptionLaw
                                           DedicatedChannelsCapacityConsumptionLaw
                                                                                  OPTIONAL.
                                       ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
   iE-Extensions
   OPTIONAL.
Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-CapacityConsumptionLaw
                                           CRITICALITY ignore
                                                                EXTENSION E-DCHCapacityConsumptionLaw
                                                                                                          PRESENCE optional } |
     ID id-E-DCH-TDD-CapacityConsumptionLaw
                                          CRITICALITY ignore
                                                                EXTENSION E-DCH-TDD-CapacityConsumptionLaw
                                                                                                        PRESENCE optional }.
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
                                       OPTIONAL,
CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-
ResourceStatusInd }}
Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
                                       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,
```

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rACH-InformationList
                                           RACH-InformationList-ResourceStatusInd
                                                                                            OPTIONAL,
    aICH-InformationList
                                           AICH-InformationList-ResourceStatusInd
                                                                                            OPTIONAL, -- FDD only
    notUsed-1-pCPCH-InformationList
                                           NULL
                                                                                            OPTIONAL.
    notUsed-2-cPCH-InformationList
                                           NULL
                                                                                            OPTIONAL.
    notUsed-3-aP-AICH-InformationList
                                           NULL
                                                                                            OPTIONAL.
    notUsed-4-cDCA-ICH-InformationList
                                           NULL
                                                                                            OPTIONAL,
    sCH-Information
                                           SCH-Information-ResourceStatusInd
                                                                                            OPTIONAL, -- Applicable to 3.84Mcps TDD only
                                           ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
    iE-Extensions
Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-ResourceStatusInd
    PRESENCE optional } |
                           -- Applicable to 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION DwPCH-LCR-Information-ResourceStatusInd
    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
    { ID id-HSDSCH-Resources-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION HS-DSCH-Resources-Information-ResourceStatusInd
                           -- For 1.28Mcps TDD, this HS-DSCH Resource Information is for the first Frequency repetition, HS-DSCH Resource
    PRESENCE optional }
Information for Frequency repetitions 2 and on, should be defined in MultipleFreg-HS-DSCH-Resources-InformationList-ResourceStatusInd.
    { ID id-MICH-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information
    PRESENCE optional } |
    { ID id-S-CCPCH-InformationListExt-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION S-CCPCH-InformationListExt-ResourceStatusInd
    PRESENCE optional }
    -- Applicable to 3.84Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
    { ID id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd
                                                               CRITICALITY ignore EXTENSION S-CCPCH-LCR-InformationListExt-ResourceStatusInd
    PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
    { ID id-E-DCH-Resources-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION E-DCH-Resources-Information-ResourceStatusInd
    PRESENCE optional } |
    -- For 1.28Mcps TDD, this E-DCH Resource Information is for the first Frequency repetition, E-DCH Resource Information for Frequency
repetitions 2 and on, should be defined in MultipleFreg-E-DCH-Resources-InformationList-ResourceStatusInd.
    { ID id-PLCCH-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION PLCCH-InformationList-ResourceStatusInd
    PRESENCE optional }
    { ID id-P-CCPCH-768-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768
    PRESENCE optional }
    { ID id-S-CCPCH-768-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION S-CCPCH-768-InformationList-ResourceStatusInd
    PRESENCE optional }
    { ID id-PICH-768-Information-ResourceStatusInd
                                                                                   EXTENSION Common-PhysicalChannel-Status-Information768
                                                                CRITICALITY ignore
    PRESENCE optional }
    { ID id-PRACH-768-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore
                                                                                   EXTENSION PRACH-768-InformationList-ResourceStatusInd
    PRESENCE optional }
    { ID id-SCH-768-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768
    PRESENCE optional } |
    { ID id-MICH-768-Information-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION Common-PhysicalChannel-Status-Information768
    PRESENCE optional }
    { ID id-E-RUCCH-InformationList-ResourceStatusInd
                                                                CRITICALITY ignore EXTENSION E-RUCCH-InformationList-ResourceStatusInd
    PRESENCE optional }
    { ID id-E-RUCCH-768-InformationList-ResourceStatusInd
                                                                    CRITICALITY ignore EXTENSION E-RUCCH-768-InformationList-ResourceStatusInd
        PRESENCE optional } |
    { ID id-Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd
                                                                                CRITICALITY ignore
                                                                                                                      EXTENSION Cell-Frequency-
List-Information-LCR-MulFreq-ResourceStatusInd
                                                        PRESENCE optional } |
                                                                                -- Applicable to 1.28Mcps TDD when using multiple frequencies
    { ID id-UPPCH-LCR-InformationList-ResourceStatusInd
                                                                                CRITICALITY ignore
                                                                                                                      EXTENSION UPPCH-LCR-
InformationList-ResourceStatusInd
                                                    PRESENCE optional }
                                                                            -- Applicable to 1.28Mcps TDD only
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{ ID id-multipleFreq-HS-DSCH-Resources-InformationList-ResourceStatusInd
                                                                  CRITICALITY ignore
                                                                                                  EXTENSION MultipleFreq-HS-
DSCH-Resources-InformationList-ResourceStatusInd PRESENCE optional }
   -- Applicable to 1.28Mcps TDD when using multiple frequencies, This HS-DSCH Resource Information is for the 2nd and beyond frequencies.
   { ID id-MultipleFreg-E-DCH-Resources-InformationList-ResourceStatusInd
                                                                                                  EXTENSION MultipleFreg-E-DCH-
                                                                  CRITICALITY ignore
Resources-InformationList-ResourceStatusInd PRESENCE optional },
   -- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-DCH Resource Information is for the 2nd and beyond frequencies.
P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}
P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}
S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}
P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-CPICH-InformationList-ResourceStatusInd ::= SEOUENCE (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 ::= {
   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 }}
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PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}
PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-
ResourceStatusInd }}
FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
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 ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-
ResourceStatusInd }}
RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-
ResourceStatusInd }}
AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}
SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-SCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                       PRESENCE mandatory }
FPACH-LCR-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-
ResourceStatusInd }}
FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}
```

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DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-DwPCH-LCR-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                                PRESENCE mandatory }
HS-DSCH-Resources-Information-ResourceStatusInd ::= SEQUENCE {
                                     ResourceOperationalState,
    resourceOperationalState
    availabilityStatus
                                     AvailabilityStatus,
   iE-Extensions
                                      ProtocolExtensionContainer {{ HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs }}
                                                                                                                              OPTIONAL,
HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                                                        PRESENCE optional },
    {ID id-UARFCNforNt
                         CRITICALITY ignore
                                                 EXTENSION UARFON
   -- Applicable to 1.28Mcps TDD when using multiple frequencies.
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 ::= SEOUENCE {
                                     ResourceOperationalState,
    resourceOperationalState
    availabilityStatus
                                     AvailabilityStatus,
   iE-Extensions
                                     ProtocolExtensionContainer {{ E-DCH-Resources-Information-ResourceStatusInd-ExtIEs }}
                                                                                                                           OPTIONAL,
E-DCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-UARFCNforNt
                          CRITICALITY ignore
                                                 EXTENSION UARFCN
                                                                        PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies.
PLCCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPLCCHCell)) OF ProtocolIE-Single-Container {{ PLCCH-InformationItemIE-
ResourceStatusInd }}
PLCCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-PLCCH-Information-ResourceStatusInd CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                                PRESENCE mandatory }
S-CCPCH-768-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell768)) OF ProtocolIE-Single-Container {{ S-CCPCH-768-
InformationItemIE-ResourceStatusInd }}
S-CCPCH-768-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE
mandatory }
PRACH-768-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-768-InformationItemIE-
ResourceStatusInd }}
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PRACH-768-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
E-RUCCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-InformationItemIE-
ResourceStatusInd }}
E-RUCCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-E-RUCCH-Information
                                 CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                              PRESENCE mandatory }
E-RUCCH-768-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxE-RUCCHCell)) OF ProtocolIE-Single-Container {{ E-RUCCH-768-
InformationItemIE-ResourceStatusInd }}
E-RUCCH-768-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-E-RUCCH-768-Information
                                     CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information768
                                                                                                              PRESENCE mandatory }
Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ Cell-
Frequency-List-InformationIE-LCR-MulFreq-ResourceStatusInd }}
Cell-Frequency-List-InformationIE-LCR-MulFreq-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    TYPE Cell-Frequency-List-
InformationItem-LCR-MulFreq-ResourceStatusInd
                                               PRESENCE mandatory }
Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd ::= SEQUENCE {
   uARFCN
                                     UARFCN,
   resourceOperationalState
                                     ResourceOperationalState,
   availabilityStatus
                                     AvailabilityStatus,
   cause
                                     ProtocolExtensionContainer {{ Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd-ExtIEs }}
   iE-Extensions
       OPTIONAL,
   . . .
Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
UPPCH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ UPPCH-LCR-InformationIE-
ResourceStatusInd }}
UPPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-UPPCH-LCR-InformationItem-ResourceStatusInd
                                                       CRITICALITY ignore TYPE UPPCH-LCR-InformationItem-ResourceStatusInd
                                                                                                                            PRESENCE
mandatory }
UPPCH-LCR-InformationItem-ResourceStatusInd ::= SEQUENCE {
   uARFCN
                                     UARFCN
                                                       OPTIONAL,
   uPPCHPositionLCR
                                     UPPCHPositionLCR,
   resourceOperationalState
                                     ResourceOperationalState,
   availabilityStatus
                                     AvailabilityStatus,
   iE-Extensions
                                     ProtocolExtensionContainer {{ UPPCH-LCR-InformationItem-ResourceStatusInd-ExtIEs }}
```

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UPPCH-LCR-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleFreq-HS-DSCH-Resources-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-
Container{{ MultipleFreq-HS-DSCH-Resources-InformationItem-ResourceStatusInd }}
--Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-HS-DSCH-Resources-InformationItem-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
Power-Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEOUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-
Local-Cell-Group-InformationItemIE2-ResourceStatusInd }}
Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   ResourceStatusInd
                   PRESENCE mandatory }
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd::= SEQUENCE {
   power-Local-Cell-Group-ID
                                Local-Cell-ID,
   maximumDL-PowerCapability
                                MaximumDL-PowerCapability,
   iE-Extensions
                                ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
   OPTIONAL,
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
MultipleFreq-E-DCH-Resources-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-
Container{{ MultipleFreq-E-DCH-Resources-InformationItem-ResourceStatusInd }}
   --Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-E-DCH-Resources-InformationItem-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
-- SYSTEM INFORMATION UPDATE REQUEST
  ****************
SystemInformationUpdateRequest ::= SEQUENCE
                                             {{SystemInformationUpdateRequest-IEs}},
   protocolIEs
                      ProtocolIE-Container
                                            {{SystemInformationUpdateRequest-Extensions}}
   protocolExtensions
                      ProtocolExtensionContainer
                                                                                                OPTIONAL,
```

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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-SystemInfoUpdateRgst ::= SEQUENCE (SIZE (1..maxIB)) OF MIB-SB-SIB-InformationItem-SystemInfoUpdateRgst
MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst ::= SEOUENCE {
   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 ::= SEQUENCE {
   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}},
                                                 {{SystemInformationUpdateResponse-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                          OPTIONAL,
SystemInformationUpdateResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                   CRITICALITY ignore
                                                             TYPE CriticalityDiagnostics
                                                                                                        PRESENCE optional },
   . . .
SystemInformationUpdateResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    SYSTEM INFORMATION UPDATE FAILURE
  ****************
SystemInformationUpdateFailure ::= SEQUENCE {
                                                  {{SystemInformationUpdateFailure-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                                                 {{SystemInformationUpdateFailure-Extensions}}
                        ProtocolExtensionContainer
                                                                                                          OPTIONAL,
SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                       CRITICALITY ignore
                                                                TYPE Cause
                                                                                                          PRESENCE mandatory
     ID id-CriticalityDiagnostics
                                       CRITICALITY ignore
                                                                TYPE CriticalityDiagnostics
                                                                                                          PRESENCE optional },
```

```
SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK SETUP REOUEST FDD
RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs
                            ProtocolIE-Container
                                                         {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions
                            Protocol ExtensionContainer
                                                       {{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-SetupRqstFDD
                                                            CRITICALITY reject TYPE UL-DPCH-Information-RL-SetupRqstFDD
                                                                                                                                PRESENCE mandatory
} |
     ID id-DL-DPCH-Information-RL-SetupRqstFDD
                                                                                                                                PRESENCE optional } |
                                                            CRITICALITY reject TYPE DL-DPCH-Information-RL-SetupRqstFDD
                                                                                                                                PRESENCE mandatory
     ID id-DCH-FDD-Information
                                                            CRITICALITY reject TYPE DCH-FDD-Information
    { ID id-RL-InformationList-RL-SetupRqstFDD
                                                            CRITICALITY notify TYPE RL-InformationList-RL-SetupRqstFDD
                                                                                                                                PRESENCE mandatory
} |
    { ID id-Transmission-Gap-Pattern-Sequence-Information
                                                            CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
        PRESENCE optional } |
    { ID id-Active-Pattern-Sequence-Information
                                                                                                                                PRESENCE optional },
                                                            CRITICALITY reject TYPE Active-Pattern-Sequence-Information
    . . .
RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-Information
                                                    CRITICALITY ignore EXTENSION DL-PowerBalancing-Information
                                                                                                                       PRESENCE optional }
     ID id-HSDSCH-FDD-Information
                                                                                                                       PRESENCE optional }
                                                    CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                       PRESENCE conditional }
    { ID id-HSDSCH-RNTI
                                                    CRITICALITY reject EXTENSION HSDSCH-RNTI
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-HSPDSCH-RL-ID
                                                    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-SetupRqstFDD
                                                                                                                       PRESENCE optional } |
                                                    CRITICALITY reject EXTENSION E-DPCH-Information-RL-SetupRqstFDD
                                                                                                                       PRESENCE conditional } |
    { ID id-E-DCH-FDD-Information
                                                    CRITICALITY reject EXTENSION E-DCH-FDD-Information
    -- The IE shall be present if E-DPCH Information IE is present
     ID id-Serving-E-DCH-RL-ID
                                                    CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
                                                                                                                       PRESENCE optional }
     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 }
    { ID id-DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                            CRITICALITY reject EXTENSION DCH-Indicator-For-E-DCH-HSDPA-Operation
                PRESENCE optional } |
     ID id-Serving-Cell-Change-CFN
                                                            CRITICALITY reject EXTENSION CFN
                                                                                                                       PRESENCE optional }
     ID id-ContinuousPacketConnectivityDTX-DRX-Information
                                                                    CRITICALITY reject
                                                                                            EXTENSION ContinuousPacketConnectivityDTX-DRX-
Information
                    PRESENCE optional }
    { ID id-ContinuousPacketConnectivityHS-SCCH-less-Information
                                                                    CRITICALITY reject
                                                                                            EXTENSION ContinuousPacketConnectivityHS-SCCH-less-
                    PRESENCE optional } |
Information
```

```
{ ID id-Additional-HS-Cell-Information-RL-Setup
                                                                    CRITICALITY reject
                                                                                             EXTENSION Additional-HS-Cell-Information-RL-Setup-List
            PRESENCE optional },
Additional-HS-Cell-Information-RL-Setup-List
                                              ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Setup-ItemIEs
Additional-HS-Cell-Information-RL-Setup-ItemIEs ::=SEQUENCE{
    hSPDSCH-RL-ID
    c-ID
                                                    C-ID,
    hS-DSCH-FDD-Secondary-Serving-Information
                                                    HS-DSCH-FDD-Secondary-Serving-Information,
                                    ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE {
    ul-ScramblingCode
                                            UL-ScramblingCode,
    minUL-ChannelisationCodeLength
                                            MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPDCHs
                                            MaxNrOfUL-DPDCHs
                                                                    OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit
                                            PunctureLimit,
                                            TFCS.
    ul-DPCCH-SlotFormat
                                            UL-DPCCH-SlotFormat,
    ul-SIR-Target
                                            UL-SIR,
                                            DiversityMode,
    diversityMode
    not-Used-sSDT-CellID-Length
                                            NULL
                                                                    OPTIONAL,
    not-Used-s-FieldLength
                                            NULL
                                                                    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    . . .
UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DPC-Mode
                                                    CRITICALITY reject EXTENSION DPC-Mode
                                                                                                                              PRESENCE optional } |
     ID id-UL-DPDCH-Indicator-For-E-DCH-Operation CRITICALITY reject EXTENSION UL-DPDCH-Indicator-For-E-DCH-Operation
                                                                                                                             PRESENCE optional },
DL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE {
    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,
    not-Used-pDSCH-RL-ID
                                            NULL
                                                                            OPTIONAL,
    not-Used-pDSCH-CodeMapping
                                                                            OPTIONAL,
    powerOffsetInformation
                                            PowerOffsetInformation-RL-SetupRqstFDD,
    fdd-TPC-DownlinkStepSize
                                            FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                            LimitedPowerIncrease,
                                            InnerLoopDLPCStatus,
    innerLoopDLPCStatus
```

```
ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-DPCH-Information-RL-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
    pO1-ForTFCI-Bits
                                            PowerOffset,
    pO2-ForTPC-Bits
                                            PowerOffset,
                                            PowerOffset,
   pO3-ForPilotBits
   iE-Extensions
                                            ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRgstFDD-ExtIEs} } OPTIONAL,
PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
    ProtocolIE-Single-Container{{    RL-InformationItemIE-RL-SetupRqstFDD }}
RL-InformationItemIE-RL-SetupRgstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-SetupRqstFDD
                                                        CRITICALITY notify
                                                                                    TYPE RL-InformationItem-RL-SetupRqstFDD
                                                                                                                                PRESENCE mandatory }
RL-InformationItem-RL-SetupRgstFDD ::= SEQUENCE {
    rL-ID
                                        RL-ID,
    c-ID
                                        C-ID,
    firstRLS-indicator
                                        FirstRLS-Indicator,
    frameOffset
                                        FrameOffset,
    chipOffset
                                        ChipOffset,
                                        PropagationDelay
                                                                        OPTIONAL,
    propagationDelay
                                        DiversityControlField
    diversityControlField
                                                                        OPTIONAL,
    -- This IE shall be present if the RL is not the first one in the RL Information IE
    dl-CodeInformation
                                        FDD-DL-CodeInformation,
    initialDL-transmissionPower
                                        DL-Power,
    maximumDL-power
                                        DL-Power,
    minimumDL-power
                                        DL-Power,
    not-Used-sSDT-Cell-Identity
                                        NULL
                                                                        OPTIONAL,
    transmitDiversityIndicator
                                        TransmitDiversityIndicator
                                                                        OPTIONAL,
    -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to 'none'
                                        ProtocolExtensionContainer { { RL-InformationItem-RL-SetupRqstFDD-ExtIEs} }
    iE-Extensions
    . . .
RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-RL-Specific-DCH-Info
                                                        CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                                     PRESENCE optional } |
      ID id-DelayedActivation
                                                        CRITICALITY reject EXTENSION DelayedActivation
                                                                                                                     PRESENCE optional }
     ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-for-Channel-Estimation PRESENCE
optional }|
      ID id-Secondary-CPICH-Information
                                                        CRITICALITY ignore EXTENSION CommonPhysicalChannelID
                                                                                                                     PRESENCE optional } |
     ID id-E-DCH-RL-Indication
                                                        CRITICALITY reject EXTENSION E-DCH-RL-Indication
                                                                                                                     PRESENCE optional }
```

```
ID id-RL-Specific-E-DCH-Info
                                                       CRITICALITY ignore EXTENSION RL-Specific-E-DCH-Info
                                                                                                                  PRESENCE optional }
     ID id-SynchronisationIndicator
                                                       CRITICALITY ignore EXTENSION SynchronisationIndicator
                                                                                                                  PRESENCE optional }
                                                       CRITICALITY ignore EXTENSION ExtendedPropagationDelay
     ID id-ExtendedPropagationDelay
                                                                                                                  PRESENCE optional }
     ID id-F-DPCH-SlotFormat
                                                       CRITICALITY reject EXTENSION F-DPCH-SlotFormat
                                                                                                                  PRESENCE optional }
     ID id-HSDSCH-PreconfigurationSetup
                                                       CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup PRESENCE optional },
E-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    maxSet-E-DPDCHs
                                               Max-Set-E-DPDCHs.
    ul-PunctureLimit
                                               PunctureLimit,
    e-TFCS-Information
                                               E-TFCS-Information,
    e-TTI
                                               E-TTI,
    e-DPCCH-PO
                                               E-DPCCH-PO.
    e-RGCH-2-IndexStepThreshold
                                               E-RGCH-2-IndexStepThreshold,
    e-RGCH-3-IndexStepThreshold
                                               E-RGCH-3-IndexStepThreshold,
    hARO-Info-for-E-DCH
                                               HARO-Info-for-E-DCH,
                                               HSDSCH-Configured-Indicator,
    hSDSCH-Configured-Indicator
                                               ProtocolExtensionContainer { { E-DPCH-Information-RL-SetupRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
E-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-E-RNTI
                                                   CRITICALITY reject EXTENSION E-RNTI
                                                                                                                  PRESENCE optional }
     ID id-MinimumReducedE-DPDCH-GainFactor
                                                   CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
F-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE {
    powerOffsetInformation
                                       PowerOffsetInformation-F-DPCH-RL-SetupRgstFDD,
                                       FDD-TPC-DownlinkStepSize,
    fdd-TPC-DownlinkStepSize
    limitedPowerIncrease
                                       LimitedPowerIncrease,
    innerLoopDLPCStatus
                                       InnerLoopDLPCStatus,
    iE-Extensions
                                       ProtocolExtensionContainer { { F-DPCH-Information-RL-SetupRqstFDD-ExtIEs} }
                                                                                                                             OPTIONAL,
F-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD ::= SEQUENCE {
    pO2-ForTPC-Bits
                                       PowerOffset,
    --This IE shall be ignored by Node B
                                       ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ****************
-- RADIO LINK SETUP REQUEST TDD
```

```
RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions
                           ProtocolExtensionContainer
                                                       {{RadioLinkSetupRequestTDD-Extensions}}
                                                                                                                   OPTIONAL,
RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                            CRITICALITY reject TYPE CRNC-CommunicationContextID
                                                                                                                               PRESENCE mandatory
} |
     ID
           id-UL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                            CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRgstTDD PRESENCE optional }
           id-DL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                            CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRgstTDD PRESENCE optional
                                                                                                                               PRESENCE optional
           id-DCH-TDD-Information
                                                            CRITICALITY reject TYPE DCH-TDD-Information
           id-DSCH-TDD-Information
                                                           CRITICALITY reject TYPE DSCH-TDD-Information
                                                                                                                               PRESENCE optional
           id-USCH-Information
                                                           CRITICALITY reject TYPE USCH-Information
                                                                                                                               PRESENCE optional }
     ID
                                                                                                                               PRESENCE mandatory
     ID
           id-RL-Information-RL-SetupRgstTDD
                                                           CRITICALITY reject TYPE RL-Information-RL-SetupRgstTDD
    . . .
RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-TDD-Information
                                           CRITICALITY reject
                                                                    EXTENSION HSDSCH-TDD-Information
                                                                                                                   PRESENCE optional } |
    ID id-HSDSCH-RNTI
                                           CRITICALITY reject
                                                                                                                   PRESENCE conditional } |
                                                                    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-PDSCH-RL-ID
                                           CRITICALITY ignore
                                                                                                                   PRESENCE optional } |
                                                                   EXTENSION RL-ID
     ID id-E-DCH-Information
                                                                                                                   PRESENCE optional }
                                           CRITICALITY reject
                                                                    EXTENSION E-DCH-Information
                                           CRITICALITY reject
                                                                                                                   PRESENCE optional }
     ID id-E-DCH-Serving-RL-ID
                                                                   EXTENSION RL-ID
     ID id-E-DCH-768-Information
                                           CRITICALITY reject
                                                                   EXTENSION E-DCH-768-Information
                                                                                                                   PRESENCE optional }
     ID id-E-DCH-LCR-Information
                                           CRITICALITY reject
                                                                   EXTENSION E-DCH-LCR-Information
                                                                                                                   PRESENCE optional }
    ID id-PowerControlGAP
                                           CRITICALITY ignore
                                                                   EXTENSION ControlGAP
                                                                                                                   PRESENCE optional },
     -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
    ProtocolIE-Single-Container {{ UL-CCTrCH-InformationItemIE-RL-SetupRgstTDD }}
UL-CCTrCH-InformationItemIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD
                                                           CRITICALITY notify
                                                                                   TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD
                                                                                                                                    PRESENCE
mandatory }
UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                           CCTrCH-ID.
    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-SetupRqstTDD-ExtIEs} }
```

```
UL-CCTrCH-InformationItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-UL-DPCH-LCR-Information-RL-SetupRgstTDD
                                                      CRITICALITY notify EXTENSION UL-DPCH-LCR-Information-RL-SetupRgstTDD PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-UL-SIRTarget
                                                      CRITICALITY reject EXTENSION UL-SIR
                                                                                                                           PRESENCE optional } |
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
   PRESENCE optional } |
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-UL-DPCH-768-Information-RL-SetupRqstTDD
                                                      CRITICALITY notify EXTENSION UL-DPCH-768-Information-RL-SetupRqstTDD
                                                                                                                          PRESENCE optional },
    -- Applicable to 7.68Mcps TDD only
    . . .
UL-DPCH-Information-RL-SetupRgstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRgstTDD }}
UL-DPCH-InformationIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationList-RL-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
                                          ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }
    . . .
UL-DPCH-InformationItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-DPCH-LCR-Information-RL-SetupRgstTDD ::= 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 ::= {
UL-DPCH-768-Information-RL-SetupRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   tdd-DPCHOffset
                                          TDD-DPCHOffset,
   uL-Timeslot768-Information
                                          UL-Timeslot768-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-768-InformationItem-RL-SetupRqstTDD-ExtIEs} }
                                                                                                                                OPTIONAL,
```

```
UL-DPCH-768-InformationItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationList-RL-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-
SetupRqstTDD }}
DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    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-SetupRqstTDD
                                                     CRITICALITY notify
                                                                            EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD
                                                                                                                               PRESENCE
optional } -- Applicable to 1.28Mcps TDD only
     ID id-CCTrCH-Initial-DL-Power-RL-SetupRgstTDD
                                                     CRITICALITY ignore
                                                                            EXTENSION DL-Power
                                                                                                                 PRESENCE optional } |
     ID id-CCTrCH-Maximum-DL-Power-RL-SetupRgstTDD
                                                     CRITICALITY ignore
                                                                            EXTENSION DL-Power
                                                                                                                 PRESENCE optional }
     ID id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD
                                                     CRITICALITY ignore
                                                                            EXTENSION DL-Power
                                                                                                                 PRESENCE optional } |
     ID id-DL-DPCH-768-Information-RL-SetupRqstTDD
                                                     CRITICALITY notify
                                                                            EXTENSION DL-DPCH-768-Information-RL-SetupRgstTDD
                                                                                                                              PRESENCE
optional }, -- Applicable to 7.68Mcps TDD only
    . . .
CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD
CCTrCH-TPCItem-RL-SetupRgstTDD ::= SEQUENCE {
   cCTrCH-ID
                                         CCTrCH-ID,
   iE-Extensions
                                         ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRgstTDD-ExtIEs} }
CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}
DL-DPCH-InformationIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD
                                                     CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD
                                                                                                                      PRESENCE mandatory
DL-DPCH-InformationItem-RL-SetupRqstTDD ::= 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
                                        OPTIONAL,
DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
DL-DPCH-768-Information-RL-SetupRgstTDD ::= SEQUENCE {
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
                                        TDD-DPCHOffset,
   tdd-DPCHOffset
   dL-Timeslot768-Information
                                        DL-Timeslot768-Information,
   iE-Extensions
                                        ProtocolExtensionContainer { { DL-DPCH-768-InformationItem-RL-SetupRqstTDD-ExtIEs} }
                                                                                                                            OPTIONAL,
   . . .
DL-DPCH-768-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-SetupRqstTDD ::= SEQUENCE
   rL-ID
                                        RL-ID,
   c-ID
                                        C-ID.
   frameOffset
                                        FrameOffset,
   specialBurstScheduling
                                        SpecialBurstScheduling,
   initialDL-transmissionPower
                                        DL-Power,
   maximumDL-power
                                        DL-Power,
   minimumDL-power
                                        DL-Power,
   dL-TimeSlotISCPInfo
                                        DL-TimeslotISCPInfo OPTIONAL, -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only
   iE-Extensions
                                        ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs} }
    . . .
RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   EXTENSION DL-TimeslotISCPInfoLCR
                                                                                                                    PRESENCE optional }
```

```
-- Applicable to 1.28Mcps TDD only
     ID id-RL-Specific-DCH-Info
                                                       CRITICALITY ignore
                                                                              EXTENSION RL-Specific-DCH-Info
                                                                                                                         PRESENCE optional
     ID id-DelayedActivation
                                                       CRITICALITY reject
                                                                              EXTENSION DelayedActivation
                                                                                                                         PRESENCE optional
     ID id-UL-Synchronisation-Parameters-LCR
                                                       CRITICALITY reject
                                                                              EXTENSION UL-Synchronisation-Parameters-LCR PRESENCE optional
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-UARFCNforNt
                                                       CRITICALITY reject
                                                                              EXTENSION UARFCN
                                                                                                                         PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
     *****************
  RADIO LINK SETUP RESPONSE FDD
   *****************
RadioLinkSetupResponseFDD ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                       {{RadioLinkSetupResponseFDD-IEs}},
                                                       {{RadioLinkSetupResponseFDD-Extensions}}
    protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                   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
                                                      CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD
                                                                                                                            PRESENCE mandatory
                                                                                                                            PRESENCE optional },
    { ID id-CriticalityDiagnostics
                                                       CRITICALITY ignore TYPE CriticalityDiagnostics
    . . .
RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-FDD-Information-Response
                                                      CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                            PRESENCE optional } |
     ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                              CRITICALITY ignore
                                                                                                                 EXTENSION
    ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                          PRESENCE optional } |
    { ID id-Additional-HS-Cell-Information-Response
                                                      CRITICALITY ignore EXTENSION Additional-HS-Cell-Information-Response-List
                                                                                                                                        PRESENCE
optional },
    . . .
Additional-HS-Cell-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-Response-ItemIEs
Additional-HS-Cell-Information-Response-ItemIEs ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                       RL-ID.
    hs-Dsch-FDD-secondary-serving-Information-Response Hs-Dsch-FDD-secondary-serving-Information-Response,
                                   ProtocolExtensionContainer { { Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container ( RL-InformationResponseItemIE-RL-
SetupRspFDD }}
RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
   RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
                                               RL-ID,
   rL-Set-ID
                                               RL-Set-ID,
   received-total-wide-band-power
                                               Received-total-wide-band-power-Value,
   diversityIndication
                                               DiversityIndication-RL-SetupRspFDD,
   not-Used-dSCH-InformationResponseList
                                                                            OPTIONAL.
   sSDT-SupportIndicator
                                               SSDT-SupportIndicator,
                                               ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-ActivationIndicator
                                                  CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                      PRESENCE optional
     ID id-E-DCH-RL-Set-ID
                                                  CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                      PRESENCE optional
} |
    ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                  CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                      PRESENCE optional
} |
     ID id-Initial-DL-DPCH-TimingAdjustment
                                                  CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                   PRESENCE optional }
   { ID id-HSDSCH-PreconfigurationInfo
                                                  CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                   PRESENCE optional },
   . . .
DiversityIndication-RL-SetupRspFDD ::= CHOICE {
   combining
                                           Combining-RL-SetupRspFDD,
   nonCombiningOrFirstRL
                                           NonCombiningOrFirstRL-RL-SetupRspFDD
Combining-RL-SetupRspFDD ::= SEQUENCE {
   rL-ID
                                           RL-ID,
                                           ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs} } 
   iE-Extensions
                                                                                                           OPTIONAL,
Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE
   dCH-InformationResponse
                                           DCH-InformationResponse,
                                           iE-Extensions
                                                                                                                        OPTIONAL,
   . . .
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NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-E-DCH-FDD-Information-Response
                                          CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                         PRESENCE optional },
   . . .
-- RADIO LINK SETUP RESPONSE TDD
  *****************
RadioLinkSetupResponseTDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                  {{RadioLinkSetupResponseTDD-IEs}},
   protocolExtensions
                        Protocol ExtensionContainer
                                                 {{RadioLinkSetupResponseTDD-Extensions}}
                                                                                                         OPTIONAL.
RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                              CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                              PRESENCE mandatory }
     ID id-NodeB-CommunicationContextID
                                              CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                                              PRESENCE mandatory }
     ID id-CommunicationControlPortID
                                              CRITICALITY ignore TYPE CommunicationControlPortID
                                                                                                              PRESENCE mandatory }
                                              CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD
                                                                                                              PRESENCE optional }
    { ID id-RL-InformationResponse-RL-SetupRspTDD
   -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
   { ID id-CriticalityDiagnostics
                                              CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                              PRESENCE optional }.
RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::=
     | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-HSDSCH-TDD-Information-Response
                                              CRITICALITY ignore
                                                                   EXTENSION HSDSCH-TDD-Information-Response
                                                                                                            PRESENCE optional } |
    ID id-E-DCH-Information-Response
                                              CRITICALITY ignore
                                                                   EXTENSION E-DCH-Information-Response
                                                                                                           PRESENCE optional },
   . . .
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-RL-SetupRspTDD
   dSCH-InformationResponseList
                                                                                                         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
                                                                 DCH-InformationResponse PRESENCE
                                                                                                        mandatory }
                                              ignore
                                                         TYPE
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 {
   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,
                                               ProtocolExtensionContainer { { RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    ****************
-- RADIO LINK SETUP FAILURE FDD
  *****************
RadioLinkSetupFailureFDD ::= SEQUENCE {
                                                   {{RadioLinkSetupFailureFDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
   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 }
     ID id-CauseLevel-RL-SetupFailureFDD
                                           CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureFDD
                                                                                                          PRESENCE mandatory } |
   { ID id-CriticalityDiagnostics
                                           CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                          PRESENCE optional },
RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

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CauseLevel-RL-SetupFailureFDD ::= CHOICE {
   generalCause
                     GeneralCauseList-RL-SetupFailureFDD,
                     RLSpecificCauseList-RL-SetupFailureFDD,
   rLSpecificCause
GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE
                                           ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} }
   iE-Extensions
   . . .
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
                                                                                                                      OPTIONAL,
   . . .
RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-FDD-Information-Response
                                           CRITICALITY ignore
                                                                 EXTENSION HSDSCH-FDD-Information-Response
                                                                                                              PRESENCE optional } |
     ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                        CRITICALITY ignore
                                                                                                           EXTENSION
   ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                     PRESENCE optional } |
   PRESENCE
optional},
   . . .
Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
   { ID id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD CRITICALITY ignore
                                                                                   TYPE Unsuccessful-RL-InformationRespItem-RL-
SetupFailureFDD PRESENCE mandatory }
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
   rL-ID
                                    RL-ID,
   cause
   iE-Extensions
                                    ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
   OPTIONAL,
   . . .
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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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 ::= SEQUENCE {
                                                RL-ID.
    rL-Set-ID
                                                RL-Set-ID,
    received-total-wide-band-power
                                                Received-total-wide-band-power-Value,
    diversityIndication
                                                DiversityIndication-RL-SetupFailureFDD,
    not-Used-dSCH-InformationResponseList
                                                                            OPTIONAL,
    not-Used-tFCI2-BearerInformationResponse
                                                NULL
                                                                            OPTIONAL.
                                                SSDT-SupportIndicator,
    sSDT-SupportIndicator
    iE-Extensions
                                                ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-ActivationIndicator
                                                        CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                    PRESENCE optional
     ID id-E-DCH-RL-Set-ID
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                                    PRESENCE optional
} |
    { ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                        CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                                    PRESENCE optional
} |
      ID id-Initial-DL-DPCH-TimingAdjustment
                                                        CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                                 PRESENCE optional }
     ID id-HSDSCH-PreconfigurationInfo
                                                        CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                                 PRESENCE optional },
DiversityIndication-RL-SetupFailureFDD ::= CHOICE
    combining
                                                Combining-RL-SetupFailureFDD,
    nonCombiningOrFirstRL
                                                NonCombiningOrFirstRL-RL-SetupFailureFDD
Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
    iE-Extensions
                                                ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} }
                                                                                                                             OPTIONAL,
    . . .
CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE
    dCH-InformationResponse
                                                DCH-InformationResponse,
    iE-Extensions
                                                    ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    . . .
```

```
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-FDD-Information-Response
                                             CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                 PRESENCE optional },
   *****************
-- RADIO LINK SETUP FAILURE TDD
      *********************
RadioLinkSetupFailureTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{RadioLinkSetupFailureTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer
                                                     {{RadioLinkSetupFailureTDD-Extensions}}
                                                                                                                 OPTIONAL,
RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                  CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                 PRESENCE mandatory
                                                                                                                 PRESENCE mandatory
          id-CauseLevel-RL-SetupFailureTDD
                                                  CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureTDD
                                                  CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                 PRESENCE optional },
    ID
          id-CriticalityDiagnostics
    . . .
RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-SetupFailureTDD ::= CHOICE {
                      GeneralCauseList-RL-SetupFailureTDD,
   generalCause
   rLSpecificCause
                      RLSpecificCauseList-RL-SetupFailureTDD,
    . . .
GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    cause
   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 ::= {
```

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Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
                                    RL-ID.
   cause
                                    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
                                                   {{RadioLinkAdditionRequestFDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                                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-AdditionRgstFDD
                                                                                                             PRESENCE mandatory
RadioLinkAdditionRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                       CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed
   PRESENCE optional } |
     ID id-Serving-E-DCH-RL-ID
                                                CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
                                                                                                                PRESENCE optional
     ID id-Serving-Cell-Change-CFN
                                                CRITICALITY reject EXTENSION CFN
                                                                                                                PRESENCE optional
     ID id-HS-DSCH-Serving-Cell-Change-Info
                                                CRITICALITY reject EXTENSION HS-DSCH-Serving-Cell-Change-Info
                                                                                                                PRESENCE optional
     ID id-E-DPCH-Information-RL-AdditionReqFDD
                                                CRITICALITY reject EXTENSION E-DPCH-Information-RL-AdditionReqFDD
                                                                                                                PRESENCE optional
     ID id-E-DCH-FDD-Information
                                                CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                PRESENCE conditional }
   -- This IE shall be present if E-DPCH Information is present
   { ID id-Additional-HS-Cell-Information-RL-Addition
                                                       CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Addition-List
   PRESENCE conditional },
```

```
Additional-HS-Cell-Information-RL-Addition-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Addition-ItemIEs
Additional-HS-Cell-Information-RL-Addition-ItemIEs ::=SEQUENCE
   hSPDSCH-RL-ID
                                            RL-ID.
   c-ID
                                            C-ID
                                                                                    OPTIONAL.
   hs-Dsch-fdd-secondary-serving-Information Hs-Dsch-fdd-secondary-serving-Information OPTIONAL,
                                 ProtocolExtensionContainer { Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIEs} } OPTIONAL,
Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-AdditionRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-
AdditionRgstFDD}}
RL-InformationItemIE-RL-AdditionRqstFDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory
RL-InformationItem-RL-AdditionRqstFDD ::= SEQUENCE
   rL-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,
   not-Used-sSDT-CellIdentity
                                            NULL
                                                                         OPTIONAL,
   transmitDiversityIndicator
                                            TransmitDiversityIndicator
                                                                         OPTIONAL,
   iE-Extensions
                                            OPTIONAL,
RL-InformationItem-RL-AdditionRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DLReferencePower
                                                   CRITICALITY ignore EXTENSION DL-Power
                                                                                                                        PRESENCE optional
} |
    ID id-RL-Specific-DCH-Info
                                                   CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                                        PRESENCE optional
} |
    ID id-DelayedActivation
                                                   CRITICALITY reject EXTENSION DelayedActivation
                                                                                                                        PRESENCE optional
    { ID id-E-DCH-RL-Indication
                                                   CRITICALITY reject EXTENSION E-DCH-RL-Indication
                                                                                                                        PRESENCE optional
} |
     ID id-RL-Specific-E-DCH-Info
                                                   CRITICALITY ignore EXTENSION RL-Specific-E-DCH-Info
                                                                                                                        PRESENCE optional
} |
    ID id-SynchronisationIndicator
                                                   CRITICALITY ignore EXTENSION SynchronisationIndicator
                                                                                                                        PRESENCE optional
} |
     ID id-F-DPCH-SlotFormat
                                                   CRITICALITY reject EXTENSION F-DPCH-SlotFormat
                                                                                                                        PRESENCE optional
} |
```

```
{ ID id-HSDSCH-PreconfigurationSetup
                                                      CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                                              PRESENCE optional
E-DPCH-Information-RL-AdditionRegFDD ::= SEQUENCE {
   maxSet-E-DPDCHs
                                              Max-Set-E-DPDCHs.
   ul-PunctureLimit
                                              PunctureLimit,
   e-TFCS-Information
                                              E-TFCS-Information,
    e-TTI
                                              E-TTI,
    e-DPCCH-PO
                                              E-DPCCH-PO,
    e-RGCH-2-IndexStepThreshold
                                              E-RGCH-2-IndexStepThreshold,
    e-RGCH-3-IndexStepThreshold
                                              E-RGCH-3-IndexStepThreshold,
   hARO-Info-for-E-DCH
                                              HARO-Info-for-E-DCH,
   iE-Extensions
                                              ProtocolExtensionContainer { { E-DPCH-Information-RL-AdditionRegFDD-ExtIEs} }
                                                                                                                              OPTIONAL,
E-DPCH-Information-RL-AdditionRegFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-Configured-Indicator
                                          CRITICALITY reject EXTENSION HSDSCH-Configured-Indicator
                                                                                                                  PRESENCE mandatory } |
    -- This shall be present for EDPCH configuration with HSDCH
   { ID id-MinimumReducedE-DPDCH-GainFactor
                                                 CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
__ *********************
-- RADIO LINK ADDITION REQUEST TDD
  *******************
RadioLinkAdditionRequestTDD ::= SEQUENCE {
                                                      {{RadioLinkAdditionRequestTDD-IEs}},
                          ProtocolIE-Container
   protocolIEs
                                                     {{RadioLinkAdditionRequestTDD-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                  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-AdditionRqstTDD PRESENCE optional
} |
     ID id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                                          CRITICALITY reject TYPE DL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional
    { ID id-RL-Information-RL-AdditionRqstTDD
                                                          CRITICALITY reject TYPE RL-Information-RL-AdditionRqstTDD
                                                                                                                              PRESENCE
mandatory },
RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-TDD-Information
                                          CRITICALITY reject
                                                                  EXTENSION HSDSCH-TDD-Information
                                                                                                                PRESENCE optional }
    { ID id-HSDSCH-RNTI
                                          CRITICALITY reject
                                                                                                                PRESENCE conditional } |
                                                                  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 } |
     ID id-E-DCH-Information
                                         CRITICALITY reject
                                                                EXTENSION E-DCH-Information
                                                                                                              PRESENCE optional }
     ID id-E-DCH-Serving-RL-ID
                                         CRITICALITY reject
                                                                EXTENSION RL-ID
                                                                                                              PRESENCE optional }
     ID id-E-DCH-768-Information
                                         CRITICALITY reject
                                                                EXTENSION E-DCH-768-Information
                                                                                                              PRESENCE optional }
     ID id-E-DCH-LCR-Information
                                         CRITICALITY reject
                                                                EXTENSION E-DCH-LCR-Information
                                                                                                             PRESENCE optional }
                                         CRITICALITY ignore
                                                                                                             PRESENCE optional },
     ID id-PowerControlGAP
                                                                EXTENSION ControlGAP
    -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                             CCTrCH-ID.
   uL-DPCH-Information
                                             UL-DPCH-InformationList-RL-AdditionRgstTDD
                                                                                           OPTIONAL, -- Applicable to 3.84cps TDD only
   iE-Extensions
                                             ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL,
    . . .
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD CRITICALITY notify EXTENSION UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD
               optional } | -- Applicable to 1.28cps TDD only
    Applicable to 1.28cps TDD only
    { ID id-UL-DPCH-InformationItem-768-RL-AdditionRgstTDD CRITICALITY notify EXTENSION UL-DPCH-InformationItem-768-RL-AdditionRgstTDD
    PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
    . . .
UL-DPCH-InformationList-RL-AdditionRgstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRgstTDD }}
UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-RL-AdditionRgstTDD CRITICALITY notify TYPE UL-DPCH-InformationItem-RL-AdditionRgstTDD PRESENCE 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-AdditionRgstTDD-ExtIEs} }
                                                                                                                           OPTIONAL.
UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
                                         RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                         RepetitionLength,
    tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-TimeslotLCR-Information
                                         UL-TimeslotLCR-Information,
```

```
ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                              OPTIONAL,
UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
UL-DPCH-InformationItem-768-RL-AdditionRqstTDD ::= SEQUENCE {
                                        RepetitionPeriod,
   repetitionPeriod
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   uL-Timeslot768-Information
                                        UL-Timeslot768-Information.
   iE-Extensions
                                        ProtocolExtensionContainer { { UL-DPCH-InformationItem-768-RL-AdditionRgstTDD-ExtIEs} }
                                                                                                                              OPTIONAL.
UL-DPCH-InformationItem-768-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD
DL-CCTrCH-InformationItem-RL-AdditionRgstTDD ::= SEOUENCE {
   cCTrCH-ID
                                 CCTrCH-ID.
   dL-DPCH-Information
                                 DL-DPCH-InformationList-RL-AdditionRqstTDD
                                                                             OPTIONAL, -- Applicable to 3.84Mcps TDD only
                                 ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    EXTENSION DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD
                  optional } | -- Applicable to 1.28Mcps TDD only
     ID id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD
                                                           CRITICALITY ignore
                                                                                                                   PRESENCE optional
                                                                                 EXTENSION DL-Power
     ID id-TDD-TPC-DownlinkStepSize-RL-AdditionRastTDD
                                                           CRITICALITY reject
                                                                                 EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional
     ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD
                                                           CRITICALITY ignore
                                                                                                                   PRESENCE optional
                                                                                 EXTENSION DL-Power
     ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD
                                                           CRITICALITY ignore
                                                                                 EXTENSION DL-Power
                                                                                                                   PRESENCE optional
     ID id-DL-DPCH-InformationItem-768-RL-AdditionRqstTDD
                                                           CRITICALITY notify
                                                                                 EXTENSION DL-DPCH-InformationItem-768-RL-AdditionRgstTDD
       PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
   . . .
DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}
DL-DPCH-InformationItemIE-RL-AdditionRgstTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE
   repetitionPeriod
                                        RepetitionPeriod,
   repetitionLength
                                        RepetitionLength,
   tdd-DPCHOffset
                                        TDD-DPCHOffset,
   dL-Timeslot-Information
                                        DL-Timeslot-Information,
   iE-Extensions
                                        ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} }
                                                                                                                           OPTIONAL,
```

```
DL-DPCH-InformationItem-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,
                                            ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationItem-768-RL-AdditionRgstTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
                                            RepetitionLength,
    repetitionLength
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    dL-Timeslot768-Information
                                            DL-Timeslot768-Information.
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-DPCH-InformationItem-768-RL-AdditionRqstTDD-ExtIEs} }
                                                                                                                                          OPTIONAL,
    . . .
DL-DPCH-InformationItem-768-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
   rL-ID
                                                RL-ID,
    C-TD
                                                C-ID.
    frameOffset
                                                FrameOffset,
    diversityControlField
                                                DiversityControlField,
    initial-DL-Transmission-Power
                                                DL-Power
                                                                    OPTIONAL,
    maximumDL-Power
                                                DL-Power
                                                                    OPTIONAL,
    minimumDL-Power
                                                DL-Power
                                                                    OPTIONAL,
    dL-TimeSlotISCPInfo
                                                DL-TimeslotISCPInfo OPTIONAL,
                                                                                 -- Applicable to 3.84Mcps TDD and 7.68Mcps 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
                                                                                                                                    optional }|
      ID id-DelayedActivation
                                                                CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }
     ID id-UL-Synchronisation-Parameters-LCR
                                                                CRITICALITY reject EXTENSION UL-Synchronisation-Parameters-LCR PRESENCE
    optional } | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-UARFCNforNt
                                                                CRITICALITY reject EXTENSION UARFON
                                                                                                                        PRESENCE optional },
```

```
-- Mandatory for 1.28Mcps TDD when using multiple frequencies
  ******************
-- RADIO LINK ADDITION RESPONSE FDD
         *******************
RadioLinkAdditionResponseFDD ::= SEQUENCE {
                          ProtocolIE-Container
                                                      {{RadioLinkAdditionResponseFDD-IEs}},
   protocolIEs
   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 ::= {
{ ID id-HS-DSCH-Serving-Cell-Change-Info-Response
                                                         CRITICALITY ignore EXTENSION HS-DSCH-Serving-Cell-Change-Info-Response
    PRESENCE optional }
{ ID id-E-DCH-Serving-Cell-Change-Info-Response
                                                          CRITICALITY ignore EXTENSION E-DCH-Serving-Cell-Change-Info-Response
    PRESENCE optional }
{ ID id-MAChs-ResetIndicator
                                                          CRITICALITY ignore EXTENSION MAChs-ResetIndicator
    PRESENCE optional } |
{ ID id-Additional-HS-Cell-Change-Information-Response
                                                         CRITICALITY ignore EXTENSION Additional-HS-Cell-Change-Information-Response-List
       PRESENCE optional },
Additional-HS-Cell-Change-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Change-Information-Response-
ItemIEs
Additional-HS-Cell-Change-Information-Response-ItemIEs ::=SEQUENCE{
   hS-DSCH-Secondary-Serving-Cell-Change-Information-Response HS-DSCH-Secondary-Serving-Cell-Change-Information-Response,
                                  ProtocolExtensionContainer { Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIEs} } OPTIONAL.
   iE-Extensions
Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}
```

```
RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-AdditionRspFDD PRESENCE
mandatory }
RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE
                                     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
} |
     ID id-E-DCH-RL-Set-ID
                                                    CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                         PRESENCE optional
} |
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                    CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                         PRESENCE optional
} |
     ID id-Initial-DL-DPCH-TimingAdjustment
                                                    CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                       PRESENCE optional } |
     ID id-HSDSCH-PreconfigurationInfo
                                                    CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                       PRESENCE optional },
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} } }
                                                                                                                      OPTIONAL,
CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-E-DCH-FDD-Information-Response
                                                    CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                       PRESENCE optional },
   . . .
Non-Combining-RL-AdditionRspFDD ::= SEQUENCE
   dCH-InformationResponse
                                            DCH-InformationResponse,
   iE-Extensions
                                            Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-FDD-Information-Response
                                                    CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                       PRESENCE optional },
```

```
-- RADIO LINK ADDITION RESPONSE TDD
__ ********************
RadioLinkAdditionResponseTDD ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                      {{RadioLinkAdditionResponseTDD-IEs}},
                                                     {{RadioLinkAdditionResponseTDD-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                OPTIONAL,
RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
                                                     CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                            PRESENCE
mandatory }|
     ID id-RL-InformationResponse-RL-AdditionRspTDD
                                                     CRITICALITY ignore TYPE RL-InformationResponse-RL-AdditionRspTDD
                                                                                                                            PRESENCE optional
           -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
     ID id-CriticalityDiagnostics
                                                     CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                            PRESENCE optional
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 or 7.68Mcps TDD
    { ID id-HSDSCH-TDD-Information-Response
                                                            CRITICALITY ignore
                                                                                       EXTENSION HSDSCH-TDD-Information-Response
    PRESENCE optional } |
    { ID id-E-DCH-Information-Response
                                                             CRITICALITY ignore
                                                                                       EXTENSION E-DCH-Information-Response
    PRESENCE optional
    . . .
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
                                             {\tt USCH-InformationResponseList-RL-AdditionRspTDD}
                                                                                                              OPTIONAL,
                                             iE-Extensions
                                                                                                                               OPTIONAL,
    . . .
RL-InformationResponse-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication
                                      DiversityIndication-RL-AdditionRspTDD,
                                      ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
```

```
DCH-Information-RL-AdditionRspTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD ::= CHOICE
    combining
                                              Combining-RL-AdditionRspTDD,
                                                                             -- Indicates whether the old Transport Bearer shall be reused or
not
   non-Combining
                                              Non-Combining-RL-AdditionRspTDD
Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID
                                              RL-ID, -- Reference RL
   iE-Extensions
                                              ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} }
                                                                                                                        OPTIONAL,
CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionRspTDD ::= SEQUENCE
   dCH-InformationResponse
                                              DCH-InformationResponse,
                                              ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs} } }
   iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
Non-CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}
DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}
USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::=
     ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse
                                                                                            PRESENCE mandatory
RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE
                                              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
                                                                                                                                   OPTIONAL,
RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

```
-- RADIO LINK ADDITION FAILURE FDD
  ****************
RadioLinkAdditionFailureFDD ::= SEOUENCE {
                           ProtocolIE-Container
    protocolIEs
                                                        {{RadioLinkAdditionFailureFDD-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer
                                                       {{RadioLinkAdditionFailureFDD-Extensions}}
                                                                                                                     OPTIONAL,
RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                   CRITICALITY ignore
                                                                           TYPE CRNC-CommunicationContextID
                                                                                                                              PRESENCE mandatory
     ID id-CauseLevel-RL-AdditionFailureFDD
                                                   CRITICALITY ignore
                                                                           TYPE CauseLevel-RL-AdditionFailureFDD
                                                                                                                              PRESENCE mandatory
} |
    { ID id-CriticalityDiagnostics
                                                   CRITICALITY ignore
                                                                           TYPE CriticalityDiagnostics
                                                                                                                              PRESENCE optional },
RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-HS-DSCH-Serving-Cell-Change-Info-Response
                                                           CRITICALITY ignore EXTENSION HS-DSCH-Serving-Cell-Change-Info-Response
    PRESENCE optional } |
{ ID id-E-DCH-Serving-Cell-Change-Info-Response
                                                           CRITICALITY ignore EXTENSION E-DCH-Serving-Cell-Change-Info-Response
    PRESENCE optional }
{ ID id-Additional-HS-Cell-Change-Information-Response
                                                               CRITICALITY ignore EXTENSION Additional-HS-Cell-Change-Information-Response-List
           PRESENCE optional },
    . . .
CauseLevel-RL-AdditionFailureFDD ::= CHOICE
    generalCause
                       GeneralCauseList-RL-AdditionFailureFDD,
    rLSpecificCause
                       RLSpecificCauseList-RL-AdditionFailureFDD,
GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    cause
                                               Cause,
    iE-Extensions
                                               ProtocolExtensionContainer { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }
                                                                                                                                    OPTIONAL,
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                   Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
                                                                   {\tt Successful-RL-InformationRespList-RL-AdditionFailureFDD}
    successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                                                                                       OPTIONAL,
    iE-Extensions
                                               ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }
                                                                                                                                       OPTIONAL,
```

```
RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationRespItem-RL-
AdditionFailureFDD PRESENCE mandatory }
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
   rL-ID
                              RL-ID,
   cause
                              Cause,
                              iE-Extensions
                                                                                                                                   OPTIONAL,
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEOUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Successful-RL-InformationRespItem-RL-
AdditionFailureFDD PRESENCE mandatory }
Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
   rI.-ID
                                              RL-ID,
   rL-Set-ID
                                              RL-Set-ID,
    received-total-wide-band-power
                                              Received-total-wide-band-power-Value,
                                              DiversityIndication-RL-AdditionFailureFDD,
   diversityIndication
    sSDT-SupportIndicator
                                              SSDT-SupportIndicator,
                                              ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-ActivationIndicator
                                                     CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                             PRESENCE optional
} |
    ID id-E-DCH-RL-Set-ID
                                                     CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                             PRESENCE optional
} |
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                     CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                             PRESENCE optional
     ID id-Initial-DL-DPCH-TimingAdjustment
                                                                                                                           PRESENCE optional } |
                                                     CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
    { ID id-HSDSCH-PreconfigurationInfo
                                                                                                                          PRESENCE optional },
                                                      CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
```

```
DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
   combining
                                Combining-RL-AdditionFailureFDD,
   non-Combining
                                Non-Combining-RL-AdditionFailureFDD
Combining-RL-AdditionFailureFDD ::= SEQUENCE {
   rI.- TD
   iE-Extensions
                                           ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } 
                                                                                                                      OPTIONAL,
CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-E-DCH-FDD-Information-Response
                                        CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                   PRESENCE optional },
   . . .
Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE
   dCH-InformationResponse
                                           DCH-InformationResponse,
                                           iE-Extensions
                                                                                                                            OPTIONAL,
Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-E-DCH-FDD-Information-Response
                                                  CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                   PRESENCE optional },
  ****************
-- RADIO LINK ADDITION FAILURE TDD
     **********************
RadioLinkAdditionFailureTDD ::= SEQUENCE {
                       ProtocolIE-Container
                                                   {{RadioLinkAdditionFailureTDD-IEs}},
   protocolIEs
                                                  {{RadioLinkAdditionFailureTDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                           OPTIONAL,
   . . .
RadioLinkAdditionFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                                        TYPE CRNC-CommunicationContextID
                                                  CRITICALITY ignore
                                                                                                              PRESENCE mandatory }
          id-CauseLevel-RL-AdditionFailureTDD
                                                   CRITICALITY ignore
                                                                        TYPE CauseLevel-RL-AdditionFailureTDD
                                                                                                              PRESENCE mandatory }
                                                  CRITICALITY ignore
                                                                                                              PRESENCE optional },
     ID
          id-CriticalityDiagnostics
                                                                        TYPE CriticalityDiagnostics
   . . .
RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
```

```
generalCause
                       GeneralCauseList-RL-AdditionFailureTDD,
   rLSpecificCause
                       RLSpecificCauseList-RL-AdditionFailureTDD,
GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
   cause
   iE-Extensions
                              ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }
                                                                                                                  OPTIONAL,
GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
                                                             Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD
                                                             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
                                  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 ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{RadioLinkReconfigurationPrepareFDD-IEs}},
                                                     {{RadioLinkReconfigurationPrepareFDD-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                  OPTIONAL,
```

```
RadioLinkReconfigurationPrepareFDD-IEs NBAP-PROTOCOL-IES ::=
    { ID id-NodeB-CommunicationContextID
                                                            CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                                      PRESENCE
mandatory } |
    { ID id-UL-DPCH-Information-RL-ReconfPrepFDD
                                                            CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                                     PRESENCE
optional }|
    { ID id-DL-DPCH-Information-RL-ReconfPrepFDD
                                                            CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                                     PRESENCE
optional }
    { ID id-FDD-DCHs-to-Modify
                                                            CRITICALITY reject TYPE FDD-DCHs-to-Modify
                                                                                                                                     PRESENCE
optional }
    { ID id-DCHs-to-Add-FDD
                                                            CRITICALITY reject TYPE DCH-FDD-Information
                                                                                                                                     PRESENCE
optional }|
    { ID id-DCH-DeleteList-RL-ReconfPrepFDD
                                                            CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD
                                                                                                                                     PRESENCE
optional }
    { ID id-RL-InformationList-RL-ReconfPrepFDD
                                                            CRITICALITY reject TYPE RL-InformationList-RL-ReconfPrepFDD
                                                                                                                                     PRESENCE
optional }
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
                                                                                                                                     PRESENCE
optional },
RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-SignallingBearerRequestIndicator
                                                                                                                             PRESENCE optional
                                                    CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
     ID id-HSDSCH-FDD-Information
                                                    CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                             PRESENCE optional
     ID id-HSDSCH-Information-to-Modify
                                                    CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
                                                                                                                            PRESENCE optional
     ID id-HSDSCH-MACdFlows-to-Add
                                                    CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                            PRESENCE optional
     ID id-HSDSCH-MACdFlows-to-Delete
                                                                                                                            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
     ID id-E-DPCH-Information-RL-ReconfPrepFDD
                                                    CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                             PRESENCE optional
     ID id-E-DCH-FDD-Information
                                                    CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                            PRESENCE optional
                                                    CRITICALITY reject EXTENSION E-DCH-FDD-Information-to-Modify
                                                                                                                            PRESENCE optional
     ID id-E-DCH-FDD-Information-to-Modify
                                                                                                                            PRESENCE optional
     ID id-E-DCH-MACdFlows-to-Add
                                                    CRITICALITY reject EXTENSION E-DCH-MACdFlows-Information
     ID id-E-DCH-MACdFlows-to-Delete
                                                    CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
                                                                                                                            PRESENCE optional
     ID id-Serving-E-DCH-RL-ID
                                                    CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
                                                                                                                             PRESENCE optional
                                                                                                                             PRESENCE optional
     ID id-F-DPCH-Information-RL-ReconfPrepFDD
                                                    CRITICALITY reject EXTENSION F-DPCH-Information-RL-ReconfPrepFDD
     ID id-Fast-Reconfiguration-Mode
                                                    CRITICALITY ignore EXTENSION Fast-Reconfiguration-Mode
                                                                                                                             PRESENCE optional
     ID id-CPC-Information
                                                    CRITICALITY reject EXTENSION CPC-Information
                                                                                                                            PRESENCE optional }
     ID id-Additional-HS-Cell-Information-RL-Reconf-Prep CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Prep
    PRESENCE optional },
Additional-HS-Cell-Information-RL-Reconf-Prep ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs
                                                       ::=SEOUENCE{
    hSPDSCH-RL-ID
                                                    RL-ID,
    c-ID
                                                    C-ID
                                                                                                     OPTIONAL,
    hS-DSCH-FDD-Secondary-Serving-Information
                                                    HS-DSCH-FDD-Secondary-Serving-Information
                                                                                                     OPTIONAL,
    hS-DSCH-Secondary-Serving-Information-To-Modify HS-DSCH-Secondary-Serving-Information-To-Modify OPTIONAL,
    hS-HS-DSCH-Secondary-Serving-Remove
                                                    HS-DSCH-Secondary-Serving-Remove
                                                                                                     OPTIONAL,
```

```
ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs} } OPTIONAL,
   iE-Extensions
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs
                                                            NBAP-PROTOCOL-EXTENSION ::=
UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
                                                                                    OPTIONAL,
   ul-ScramblingCode
                                                  UL-ScramblingCode
   ul-SIR-Target
                                                                                    OPTIONAL,
                                                  UL-SIR
   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,
    + FCS
                                                  TECS
                                                                                    OPTIONAL,
   ul-DPCCH-SlotFormat
                                                  UL-DPCCH-SlotFormat
                                                                                    OPTIONAL,
   diversityMode
                                                  DiversityMode
                                                                                    OPTIONAL,
    not-Used-sSDT-CellIDLength
                                                  NULL
                                                                                    OPTIONAL,
   not-Used-s-FieldLength
                                                  NULL
                                                                                    OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
    . . .
UL-DPCH-Information-RL-ReconfPrepFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional },
    . . .
DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
   t.FCS
                                                                                    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,
   not-Used-pDSCH-CodeMapping
                                                  NULL
                                                                                    OPTIONAL,
   not-Used-pDSCH-RL-ID
                                                  NULL
                                                                                    OPTIONAL,
   limitedPowerIncrease
                                                 LimitedPowerIncrease
                                                                                    OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-Power-Information-RL-ReconfPrepFDD CRITICALITY reject EXTENSION DL-DPCH-Power-Information-RL-ReconfPrepFDD PRESENCE optional
},
DL-DPCH-Power-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    powerOffsetInformation
                                          PowerOffsetInformation-RL-ReconfPrepFDD,
    fdd-TPC-DownlinkStepSize
                                          FDD-TPC-DownlinkStepSize,
    innerLoopDLPCStatus
                                          InnerLoopDLPCStatus,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs } }
                                                                                                                                   OPTIONAL,
```

```
DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-ReconfPrepFDD ::= SEQUENCE {
    pO1-ForTFCI-Bits
                                           PowerOffset,
                                           PowerOffset,
   pO2-ForTPC-Bits
   pO3-ForPilotBits
                                           PowerOffset,
                                           ProtocolExtensionContainer { { PowerOffsetInformation-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
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-TD
                                                    DCH-ID.
                                                    ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL.
   iE-Extensions
DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfPrepFDD }}
RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationItem-RL-ReconfPrepFDD
                                                                                                                   RL-InformationItem-RL-
                                                           CRITICALITY
                                                                           reiect
                                                                                           TYPE
ReconfPrepFDD
               PRESENCE mandatory }
RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
    rL-ID
                                                    RL-ID,
    dl-CodeInformation
                                                    FDD-DL-CodeInformation
                                                                                                OPTIONAL,
    maxDL-Power
                                                    DL-Power
                                                                                                OPTIONAL,
    minDL-Power
                                                   DL-Power
                                                                                               OPTIONAL,
   not-Used-sSDT-Indication
                                                   NULL
                                                                                               OPTIONAL,
   not-Used-sSDT-Cell-Identity
                                                   NULL
                                                                                                OPTIONAL,
    transmitDiversityIndicator
                                                   TransmitDiversityIndicator
                                                                                               OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to 'none'
                                                    ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfPrepFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                     OPTIONAL,
RL-InformationItem-RL-ReconfPrepFDD-ExtIEs 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-DL-DPCH-TimingAdjustment
                                                   CRITICALITY reject EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                            PRESENCE optional } |
     ID id-Primary-CPICH-Usage-for-Channel-Estimation
                                                           CRITICALITY ignore EXTENSION Primary-CPICH-Usage-for-Channel-Estimation
    PRESENCE optional } |
     ID id-Secondary-CPICH-Information-Change
                                                    CRITICALITY ignore EXTENSION Secondary-CPICH-Information-Change
                                                                                                                            PRESENCE optional }
     ID id-E-DCH-RL-Indication
                                                    CRITICALITY reject EXTENSION E-DCH-RL-Indication
                                                                                                                            PRESENCE optional
                                                    CRITICALITY ignore EXTENSION RL-Specific-E-DCH-Info
                                                                                                                            PRESENCE optional }
     ID id-RL-Specific-E-DCH-Info
     ID id-F-DPCH-SlotFormat
                                                    CRITICALITY reject EXTENSION F-DPCH-SlotFormat
                                                                                                                            PRESENCE optional }.
E-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
    maxSet-E-DPDCHs
                                               Max-Set-E-DPDCHs
                                                                                                                               OPTIONAL,
    ul-PunctureLimit
                                               PunctureLimit
                                                                                                                               OPTIONAL.
    e-TFCS-Information
                                               E-TFCS-Information
                                                                                                                               OPTIONAL.
    e-TTI
                                               E-TTI
                                                                                                                               OPTIONAL,
    e-DPCCH-PO
                                               E-DPCCH-PO
                                                                                                                               OPTIONAL,
    e-RGCH-2-IndexStepThreshold
                                               E-RGCH-2-IndexStepThreshold
                                                                                                                               OPTIONAL,
                                               E-RGCH-3-IndexStepThreshold
    e-RGCH-3-IndexStepThreshold
                                                                                                                               OPTIONAL,
                                               HARO-Info-for-E-DCH
    hARO-Info-for-E-DCH
                                                                                                                               OPTIONAL,
    hSDSCH-Configured-Indicator
                                               HSDSCH-Configured-Indicator
                                                                                                                               OPTIONAL,
    iE-Extensions
                                               ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                              OPTIONAL,
    . . .
E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MinimumReducedE-DPDCH-GainFactor
                                                   CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
    . . .
F-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    powerOffsetInformation
                                       PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD
    fdd-TPC-DownlinkStepSize
                                       FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                       LimitedPowerIncrease,
    innerLoopDLPCStatus
                                       InnerLoopDLPCStatus,
                                       ProtocolExtensionContainer { { F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                  OPTIONAL.
F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD ::= SEQUENCE {
    pO2-ForTPC-Bits
                                        PowerOffset,
    -- This IE shall be ignored by Node B
                                       ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ *********************
```

```
-- RADIO LINK RECONFIGURATION PREPARE TDD
__ *********************
RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
                                                        {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolIEs
                           ProtocolIE-Container
    protocolExtensions
                           ProtocolExtensionContainer
                                                      {{RadioLinkReconfigurationPrepareTDD-Extensions}}
                                                                                                                     OPTIONAL,
RadioLinkReconfigurationPrepareTDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID
                                                               CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                                              PRESENCE mandatory
} |
    { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
    PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
    PRESENCE optional }
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
    PRESENCE optional } |
     ID id-TDD-DCHs-to-Modify
                                                               CRITICALITY reject TYPE TDD-DCHs-to-Modify
                                                                                                                              PRESENCE optional }
     ID id-DCHs-to-Add-TDD
                                                               CRITICALITY reject TYPE DCH-TDD-Information
                                                                                                                              PRESENCE optional
                                                                                                                              PRESENCE optional }
     ID id-DCH-DeleteList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
     ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD
                                                               CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-ReconfPrepTDD
    PRESENCE optional } |
     ID id-DSCHs-to-Add-TDD
                                                                                                                              PRESENCE optional } |
                                                               CRITICALITY reject TYPE DSCH-TDD-Information
     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 }
                                                   CRITICALITY reject EXTENSION HSDSCH-TDD-Information
     ID
           id-HSDSCH-TDD-Information
                                                                                                                           PRESENCE optional
     ID
           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
                                                                                                                           PRESENCE optional }
     ID
           id-HSDSCH-MACdFlows-to-Delete
                                                   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 }
           id-PDSCH-RL-ID
                                                                                                                           PRESENCE optional }
    { ID
                                                   CRITICALITY ignore EXTENSION RL-ID
```

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id-multiple-RL-Information-RL-ReconfPrepTDD
                                                        CRITICALITY reject EXTENSION MultipleRL-Information-RL-ReconfPrepTDD
                                                                                                                              PRESENCE
optional
-- This RL Information is the for the 2nd and beyond repetition of RL information.
     ID id-E-DCH-Information-Reconfig
                                                 CRITICALITY reject EXTENSION E-DCH-Information-Reconfig
                                                                                                                      PRESENCE optional }
     ID id-E-DCH-Serving-RL-ID
                                                 CRITICALITY reject EXTENSION RL-ID
                                                                                                                      PRESENCE optional
     ID id-E-DCH-768-Information-Reconfig
                                                 CRITICALITY reject EXTENSION E-DCH-768-Information-Reconfig
                                                                                                                      PRESENCE optional
     ID id-E-DCH-LCR-Information-Reconfig
                                                 CRITICALITY reject EXTENSION E-DCH-LCR-Information-Reconfig
                                                                                                                      PRESENCE optional }
    { ID id-PowerControlGAP
                                                                                                                   PRESENCE optional }.
                                                     CRITICALITY ignore EXTENSION ControlGAP
    -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                             CCTrCH-ID,
    t.FCS
                                             TFCS,
   tFCI-Coding
                                             TFCI-Coding,
   punctureLimit
                                             PunctureLimit,
   ul-DPCH-InformationList
                                             UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
   iE-Extensions
                                             ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
   { ID id-UL-SIRTarget
                                                            CRITICALITY reject EXTENSION UL-SIR
                                                                                                             PRESENCE optional }
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
-- This Information is the for the first RL repetition, SIR Target information for RL repetitions 2 and on, should be defined in MultipleRL-UL-
DPCH-InformationAddList-RL-ReconfPrepTDD
     ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE optional
-- This Information is the for the first RL repetition, TPCinformation for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationAddList-RL-ReconfPrepTDD
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-RL-ID
                                                            CRITICALITY ignore EXTENSION RL-ID
                                                                                                              PRESENCE optional }
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-ul-DPCH-InformationList
                                                            CRITICALITY reject EXTENSION MultipleRL-UL-DPCH-InformationAddList-RL-
ReconfPrepTDD PRESENCE optional }
-- This Information is the for the 2nd and beyond RL repetition,
   { ID id-UL-DPCH-768-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-768-InformationAddList-RL-ReconfPrepTDD
   PRESENCE optional }, -- Applicable to 7.68Mcps TDD only, first radio link
    . . .
UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
```

```
{ ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD
                                                        CRITICALITY reject
                                                                               TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD
                                                                                                                                 PRESENCE
mandatory }
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE
    repetitionPeriod
                                         RepetitionPeriod,
                                         RepetitionLength,
   repetitionLength
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-Timeslot-Information
                                         UL-Timeslot-Information,
                                         ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
                                                                                                                              OPTIONAL,
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
    tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-Timeslot-InformationLCR
                                         UL-TimeslotLCR-Information,
                                         ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-UL-DPCH-InformationAddListIE-RL-
Reconf PrepTDD
--Includes the 2nd through the max number of radio link repetitions.
MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD ::= SEQUENCE
   ul-DPCH-InformationList
                                             UL-DPCH-InformationAddList-RL-ReconfPrepTDD
                                                                                           OPTIONAL,
   ul-DPCH-InformationListLCR
                                             UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
   ul-sir-target
                                             UL-SIR
                                                                                           OPTIONAL,
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    tDD-TPC-UplinkStepSize-LCR
                                             TDD-TPC-UplinkStepSize-LCR
                                                                                           OPTIONAL,
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
   rL-ID
                                                                                           OPTIONAL.
   iE-Extensions
                                             ProtocolExtensionContainer { { MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs} }
       OPTIONAL,
    . . .
MultipleRL-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional },
UL-DPCH-768-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
```

```
repetitionPeriod
                                           RepetitionPeriod,
    repetitionLength
                                           RepetitionLength,
    tdd-DPCHOffset
                                           TDD-DPCHOffset.
   uL-Timeslot-Information768
                                           UL-Timeslot768-Information,
                                           ProtocolExtensionContainer { { UL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                     OPTIONAL.
UL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                               CCTrCH-ID,
    t.FCS
                                               TFCS
                                                                                                                  OPTIONAL,
    tFCI-Coding
                                               TFCI-Coding
                                                                                                                 OPTIONAL,
   punctureLimit
                                               PunctureLimit
                                                                                                                 OPTIONAL,
    ul-DPCH-InformationAddList
                                               UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                 OPTIONAL.
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    ul-DPCH-InformationModifyList
                                               UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                 OPTIONAL,
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
   ul-DPCH-InformationDeleteList
                                               UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
-- 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-
InformationModifvList-RL-ReconfPrepTDD
    { ID id-RL-ID
                                                       CRITICALITY ignore
                                                                              EXTENSION
                                                                                              RL-ID
                                                                                                                    PRESENCE optional }
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-ul-DPCH-InformationModifyList
                                                      CRITICALITY reject
                                                                              EXTENSION
                                                                                              MultipleRL-UL-DPCH-InformationModifyList-RL-
ReconfPrepTDD PRESENCE optional
-- This DPCH Information is the for the 2nd and beyond RL repetition,
    { ID id-UL-DPCH-768-InformationModify-AddItem
                                                   CRITICALITY reject
                                                                          EXTENSION
                                                                                       UL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD
    PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
```

```
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-UL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    . . .
UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
       PRESENCE mandatory }
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
    uL-Timeslot-Information
                                          UL-Timeslot-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
    . . .
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModifyListIEs-RL-ReconfPrepTDD
} }
UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                            TYPE UL-DPCH-InformationModify-ModifyItem-RL-
Reconf PrepTDD
                   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,
                                          ProtocolExtensionContainer { { UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD
                                                          CRITICALITY reject
                                                                                 EXTENSION
                                                                                            UL-TimeslotLCR-InformationModify-ModifyList-RL-
Reconf PrepTDD
                   PRESENCE optional }
                                        -- Applicable to 1.28Mcps TDD only
    { ID id-UL-Timeslot768-Information-RL-ReconfPrepTDD
                                                         CRITICALITY reject
                                                                                 EXTENSION
                                                                                            UL-Timeslot768-InformationModify-ModifyList-RL-
                   PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
ReconfPrepTDD
```

```
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.
                                          MidambleShiftAndBurstType
   midambleShiftAndBurstType
                                                                         OPTIONAL,
   tFCI-Presence
                                          TFCI-Presence
                                                                         OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                     UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD
   iE-Extensions
                                          OPTIONAL,
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
Reconf PrepTDD
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
                                          DPCH-ID,
                                          TDD-ChannelisationCode
    tdd-ChannelisationCode
                                                                     OPTIONAL,
   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
                                          ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
       OPTIONAL.
    . . .
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PLCCH-Information-RL-ReconfPrepTDDLCR CRITICALITY reject
                                                                         EXTENSION PLCCHinformation
                                                                                                               PRESENCE optional }.
    . . .
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDDLCR
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR ::= SEQUENCE
```

```
dPCH-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-Timeslot768-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-768-InformationModify-ModifyItem-
RL-ReconfPrepTDD
                  -- Applicable to 7.68Mcps TDD only
UL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768
                                                                            OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                                            OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD768
                                                                            UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD768
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
        OPTIONAL,
UL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD768 ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD768
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD768 ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768
                                                                            OPTIONAL,
                                            ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD768-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD768-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD
} }
UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD
                    PRESENCE mandatory }
```

```
UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
Reconf PrepTDD
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
    iE-Extensions
                                        ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
    . . .
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
                                            TDD-DPCHOffset,
    tdd-DPCHOffset
    uL-Timeslot-InformationLCR
                                            UL-TimeslotLCR-Information,
                                            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-UL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-UL-DPCH-InformationModifyListIE-RL-
Reconf PrepTDD
--Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD ::= SEQUENCE {
    ul-DPCH-InformationAddList
                                                UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
   ul-DPCH-InformationModifvList
                                                UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    ul-DPCH-InformationDeleteList
                                                UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL.
    ul-DPCH-InformationAddListLCR
                                                UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    ul-sir-target
                                                UL-SIR
                                                                                                                     OPTIONAL,
    tDD-TPC-UplinkStepSize-LCR
                                                TDD-TPC-UplinkStepSize-LCR
                                                                                                                     OPTIONAL,
                                                RL-ID
                                                                                                                     OPTIONAL,
    -- This DPCH Information is the for the 2nd and beyond RL repetitions,
                                                ProtocolExtensionContainer { { MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs}
    iE-Extensions
        OPTIONAL,
MultipleRL-UL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-UL-DPCH-768-InformationModify-AddList CRITICALITY reject
                                                                            EXTENSION UL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD
    PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
    . . .
UL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
```

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repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset.
   uL-Timeslot-Information768
                                          UL-Timeslot768-Information.
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL.
UL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
   iE-Extensions
                                              OPTIONAL,
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE
   cCTrCH-ID
                                                  CCTrCH-ID,
   t.FCS
                                                  TFCS,
   tFCI-Coding
                                                  TFCI-Coding,
   punctureLimit
                                                  PunctureLimit,
   cCTrCH-TPCList
                                                  CCTrCH-TPCAddList-RL-ReconfPrepTDD
                                                                                                                OPTIONAL,
                                                  DL-DPCH-InformationAddList-RL-ReconfPrepTDD
   dl-DPCH-InformationList
                                                                                                                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
                                                  ProtocolExtensionContainer {    DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   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-
ReconfPrepTDD
                   PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
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 } |
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-- 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
                                                                        CRITICALITY reject EXTENSION MultipleRL-DL-DPCH-InformationAddList-RL-
   { ID id-multipleRL-dl-DPCH-InformationList
ReconfPrepTDD PRESENCE optional } |
-- This DPCH Information is the for the 2nd and beyond RL repetition,
    { ID id-DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD
                                                                        CRITICALITY reject EXTENSION DL-DPCH-768-InformationAddList-RL-
                   PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
Reconf PrepTDD
    . . .
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
                                                                                                                       -- Applicable to 3.84Mcps TDD
and 7.68Mcps TDD only
CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                            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 ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                    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,
                                            ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                      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
                                            ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                                         OPTIONAL,
```

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DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-DPCH-InformationAddListIE-RL-
Reconf PrepTDD
    --Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD ::= SEQUENCE
    dl-DPCH-InformationList
                                                                DL-DPCH-InformationAddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL.
    dl-DPCH-InformationListLCR
                                                                DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
                                                                                                                     OPTIONAL,
    cCTrCH-Initial-DL-Power
                                                                DL-Power
                                                                                                                     OPTIONAL,
    tDD-TPC-DownlinkStepSize
                                                                TDD-TPC-DownlinkStepSize
                                                                                                                     OPTIONAL,
    cCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                DL-Power
                                                                                                                     OPTIONAL,
    cCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD
                                                                DL-Power
                                                                                                                     OPTIONAL,
                                                                RL-ID
                                                                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { { MultipleRL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
MultiplerL-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD
                                                                 CRITICALITY reject EXTENSION DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional },
                          -- Applicable to 7.68Mcps TDD only
    . . .
DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    dL-Timeslot-Information768
                                            DL-Timeslot768-Information,
                                            ProtocolExtensionContainer { { DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
DL-DPCH-768-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.
    tFCS
                                                    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,
```

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-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
    dl-DPCH-InformationDeleteList
                                                 DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
                                                 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-
                              PRESENCE optional } -- Applicable to 1.28Mcps TDD only
AddList-RL-ReconfPrepTDD
-- This DPCH Information is the for the first RL repetition, DPCH information for RL repetitions 2 and on, should be defined in MultipleRL-DL-DPCH-
InformationModifyList-RL-ReconfPrepTDD
     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-InformationModifvList-RL-ReconfPrepTDD
    { ID id-RL-ID
                      CRITICALITY ignore
                                             EXTENSION
                                                            RI-TD
                                                                        PRESENCE optional
-- This is the RL ID for the first RL repetition
    { ID id-multipleRL-dl-DPCH-InformationModifyList
                                                     CRITICALITY reject
                                                                                           MultipleRL-DL-DPCH-InformationModifyList-RL-
                                                                            EXTENSION
ReconfPrepTDD PRESENCE optional } |
-- This DPCH Information is the for the 2nd and beyond RL repetitions,
     ID id-DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD CRITICALITY reject
                                                                                       EXTENSION
                                                                                                              DL-DPCH-768-InformationModify-
AddList-RL-ReconfPrepTDD
                              PRESENCE optional }, -- Applicable to 7.68Mcps TDD only first radio link
CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
                                       ::= SEQUENCE {
    cCTrCH-ID
                                         CCTrCH-ID,
                                         iE-Extensions
                                                                                                                         OPTIONAL,
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
-- Applicable to 3.84Mcps TDD only
DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
       PRESENCE mandatory }
```

```
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength.
    t.dd-DPCHOffset
                                          TDD-DPCHOffset.
    dL-Timeslot-Information
                                          DL-Timeslot-Information.
                                          ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModifyListIEs-RL-ReconfPrepTDD
}}
DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                            TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD
                   PRESENCE mandatory }
DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod
                                                                     OPTIONAL,
    repetitionLength
                                          RepetitionLength
                                                                     OPTIONAL,
    tdd-DPCHOffset
                                          TDD-DPCHOffset
                                                                     OPTIONAL.
    dL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD
                                                                     DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                                   OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                                  EXTENSION
                                                                                                                                 DL-Timeslot-
LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                      PRESENCE optional } |
    { ID id-DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                                  EXTENSION
                                                                                                                                 DL-Timeslot-
768-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                      PRESENCE optional },
DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
Reconf PrepTDD
DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                          ::= SEQUENCE {
    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 ::= {
```

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DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                      ::= SEOUENCE {
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode
                                                                     OPTIONAL.
                                          ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                              ::= SEQUENCE
    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 ::= {
    { ID id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                  PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
   { ID id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                  PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
    . . .
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF DL-Code-LCR-InformationModify-ModifyItem-RL-
Reconf PrepTDD
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                          ::= SEQUENCE {
   dPCH-ID
                                          DPCH-ID,
    tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR
                                                                         OPTIONAL,
   iE-Extensions
                                          OPTIONAL,
    . . .
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD CRITICALITY
                                                                               reject EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR PRESENCE
optional},
```

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DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-768-InformationModify-
ModifyItem-RL-ReconfPrepTDD
DL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                               ::= SEOUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                                OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                                                OPTIONAL,
    dL-Code-768-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                            DL-Code-768-InformationModify-ModifyList-RL-ReconfPrepTDD
    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
       OPTIONAL.
    . . .
DL-Timeslot-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-768-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs768)) OF DL-Code-768-InformationModify-ModifyItem-RL-
Reconf PrepTDD
DL-Code-768-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                             ::= SEOUENCE {
    dPCH-ID768
                                            DPCH-ID768.
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768
                                                                            OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { DL-Code-768-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
DL-Code-768-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD
}}
DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                                TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD
                    PRESENCE mandatory }
DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
Reconf PrepTDD
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
                                                DPCH-ID,
                                                ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
```

```
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
                                            RepetitionLength,
    repetitionLength
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    dL-Timeslot-InformationLCR
                                            DL-TimeslotLCR-Information,
                                            ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-DL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-DPCH-InformationModifyListIE-RL-
Reconf PrepTDD
    --Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD ::= SEQUENCE {
    dl-DPCH-InformationAddList
                                                                     DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                              OPTIONAL,
    dl-DPCH-InformationModifvList
                                                                     DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                              OPTIONAL,
    dl-DPCH-InformationDeleteList
                                                                     DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                                              OPTIONAL,
    dl-DPCH-InformationAddListLCR
                                                                     DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
                                                                                                                             OPTIONAL,
    tDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD
                                                                     TDD-TPC-DownlinkStepSize
                                                                                                                              OPTIONAL,
    cCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                     DL-Power
                                                                                                                              OPTIONAL,
    cCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD
                                                                     DL-Power
                                                                                                                              OPTIONAL,
    rL-ID
                                                                     RL-ID
                                                                                                                              OPTIONAL,
    iE-Extensions
                                                                     ProtocolExtensionContainer { { MultipleRL-DL-DPCH-InformationModifyListIE-RL-
ReconfPrepTDD-ExtIEs} }
                            OPTIONAL,
    . . .
MultipleRL-DL-DPCH-InformationModifyListIE-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                             EXTENSION
                                                                                                                     DL-DPCH-768-InformationModify-
                                PRESENCE optional }, -- Applicable to 7.68Mcps TDD only
AddList-RL-ReconfPrepTDD
    . . .
DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
                                            RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    dL-Timeslot-Information768
                                            DL-Timeslot768-Information.
    iE-Extensions
                                            ProtocolExtensionContainer {    DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
                                                    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
                                                DCH-ID,
    iE-Extensions
                                                ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } }
                                                                                                                             OPTIONAL.
    . . .
DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD
DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID
                                                DSCH-ID,
    cCTrCH-ID
                                                CCTrCH-ID
                                                                            OPTIONAL,
    -- DL CCTrCH in which the DSCH is mapped
    transportFormatSet
                                                TransportFormatSet
                                                                            OPTIONAL,
    allocationRetentionPriority
                                                AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                FrameHandlingPriority
                                                                            OPTIONAL,
    toAWS
                                                ToAWS
                                                                            OPTIONAL,
                                                ToAWE
                                                                            OPTIONAL,
    transportBearerRequestIndicator
                                                TransportBearerRequestIndicator,
    iE-Extensions
                                                ProtocolExtensionContainer { | DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } | OPTIONAL,
DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                        CRITICALITY ignore EXTENSION BindingID
                                                                                                 PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                        CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                                 PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlQos
                                        CRITICALITY ignore EXTENSION TnlQos
                                                                                                 PRESENCE optional
    . . .
DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD
```

```
DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dscH-ID
                                           DSCH-ID.
   iE-Extensions
                                           USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD
USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   uSCH-ID
                                           USCH-ID,
                                           TransportFormatSet
   transportFormatSet
                                                                    OPTIONAL,
   allocationRetentionPriority
                                           AllocationRetentionPriority OPTIONAL,
                                           CCTrCH-ID
                                                                               -- UL CCTrCH in which the USCH is mapped
   cCTrCH-ID
                                                                    OPTIONAL,
   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
                                           USCH-ID,
   iE-Extensions
                                           ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                          OPTIONAL,
USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MultipleRL-Information-RL-ReconfPrepTDD ::= SEOUENCE (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 {
   rI.-ID
                                           RL-ID.
                                           DL-Power
   maxDL-Power
                                                             OPTIONAL,
   minDL-Power
                                           DL-Power
                                                             OPTIONAL,
   iE-Extensions
                                           OPTIONAL,
```

```
RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-Init.DL-Power
                                                    CRITICALITY ignore EXTENSION DL-Power
                                                                                                                PRESENCE optional
                                                    CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
     ID id-RL-Specific-DCH-Info
                                                                                                                PRESENCE optional
    { ID id-UL-Synchronisation-Parameters-LCR
                                                    CRITICALITY ignore EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                PRESENCE optional }
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
   { ID id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-TimeslotISCPInfoLCR
                                                                                                                PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only
   { ID id-UARFCNforNt
                                                    CRITICALITY reject EXTENSION UARFON
                                                                                                                PRESENCE optional },
     -- Applicable to 1.28Mcps TDD when using multiple frequencies
  *****************
  RADIO LINK RECONFIGURATION READY
    RadioLinkReconfigurationReady ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{RadioLinkReconfigurationReady-IEs}},
                                                   {{RadioLinkReconfigurationReady-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                             OPTIONAL,
   . . .
RadioLinkReconfigurationReady-IES NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                    CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                                   PRESENCE mandatory } |
     ID id-RL-InformationResponseList-RL-ReconfReady
                                                                                                                  PRESENCE optional } |
                                                   CRITICALITY ignore TYPE RL-InformationResponseList-RL-ReconfReady
    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-Information-Response
                                            CRITICALITY ignore
                                                                  EXTENSION E-DCH-Information-Response
                                                                                                             PRESENCE optional }
     ID id-MAChs-ResetIndicator
                                                                                                             PRESENCE optional }
                                            CRITICALITY ignore
                                                                  EXTENSION MAChs-ResetIndicator
     ID id-Fast-Reconfiguration-Permission
                                            CRITICALITY ignore
                                                                  EXTENSION Fast-Reconfiguration-Permission
                                                                                                             PRESENCE optional }
     ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                          CRITICALITY ignore
                                                                                                             EXTENSION
   ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                      PRESENCE optional } |
    { ID id-Additional-HS-Cell-Information-Response CRITICALITY ignore
                                                                          EXTENSION Additional-HS-Cell-Information-Response-List
   PRESENCE optional },
   . . .
                                         ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
RL-InformationResponseList-RL-ReconfReady
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
                                                 DSCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
   uSCH-InformationResponseList-RL-ReconfReady
                                                 USCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
   not-Used-tFCI2-BearerInformationResponse
   iE-Extensions
                                                 ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} }
   OPTIONAL,
RL-InformationResponseItem-RL-ReconfReady-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-UpdatedIndicator
                                                     CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
                                                                                                                           PRESENCE optional
     ID id-E-DCH-RL-Set-ID
                                                     CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                           PRESENCE optional
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                    CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
                                                                                                                           PRESENCE optional
    { ID id-E-DCH-FDD-Information-Response
                                                     CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                           PRESENCE optional
},
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 {
   protocolIEs
                          ProtocolIE-Container
                                                     \{\{	ext{RadioLinkReconfigurationFailure-IEs}\}\},
   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
   iE-Extensions
                                             ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }
                                                                                                                            OPTIONAL.
    . . .
GeneralCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
                                                     RL-ReconfigurationFailureList-RL-ReconfFailure
   rL-ReconfigurationFailureList-RL-ReconfFailure
                                                                                                                 OPTIONAL,
   iE-Extensions
                                                     ProtocolExtensionContainer { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs} }
   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
                                             iE-Extensions
   OPTIONAL,
```

```
RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RADIO LINK RECONFIGURATION COMMIT
  *****************
RadioLinkReconfigurationCommit ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                             {{RadioLinkReconfigurationCommit-IEs}},
   protocolExtensions
                   ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}
                                                                                               OPTIONAL,
RadioLinkReconfigurationCommit-IEs NBAP-PROTOCOL-IES ::= {
         id-NodeB-CommunicationContextID
                                          CRITICALITY ignore TYPE NodeB-CommunicationContextID
                                                                                             PRESENCE mandatory }
                                          CRITICALITY ignore TYPE CFN
                                                                                             PRESENCE mandatory } |
    ID
   { ID
         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 id-NodeB-CommunicationContextID
                                          CRITICALITY ignore
                                                             TYPE NodeB-CommunicationContextID
                                                                                                  PRESENCE mandatory },
   . . .
RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ******************
-- RADIO LINK RECONFIGURATION REQUEST FDD
```

```
RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{RadioLinkReconfigurationRequestFDD-IEs}},
                            ProtocolExtensionContainer
                                                        {{RadioLinkReconfigurationReguestFDD-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
     ID id-DL-DPCH-Information-RL-ReconfRgstFDD
                                                            CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                               PRESENCE optional
     ID id-FDD-DCHs-to-Modify
                                                            CRITICALITY reject TYPE FDD-DCHs-to-Modify
                                                                                                                               PRESENCE optional
     ID id-DCHs-to-Add-FDD
                                                            CRITICALITY reject TYPE DCH-FDD-Information
                                                                                                                               PRESENCE optional
     ID id-DCH-DeleteList-RL-ReconfRqstFDD
                                                            CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD
                                                                                                                               PRESENCE optional
     ID id-RL-InformationList-RL-ReconfRgstFDD
                                                           CRITICALITY reject TYPE RL-InformationList-RL-ReconfRgstFDD
                                                                                                                               PRESENCE optional }
     ID id-Transmission-Gap-Pattern-Sequence-Information
                                                          CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE
optional },
RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-SignallingBearerRequestIndicator
                                                       CRITICALITY reject EXTENSION SignallingBearerRequestIndicator
                                                                                                                            PRESENCE optional }
     ID id-HSDSCH-FDD-Information
                                                        CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                            PRESENCE optional } |
     ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised
                                                                                                                                     PRESENCE
optional }|
     ID id-HSDSCH-MACdFlows-to-Add
                                                        CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                            PRESENCE optional }
                                                                                                                            PRESENCE optional }
     ID id-HSDSCH-MACdFlows-to-Delete
                                                        CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
     ID id-HSDSCH-RNTI
                                                                                                                            PRESENCE conditional } |
                                                        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
     ID id-E-DPCH-Information-RL-ReconfRqstFDD
                                                        CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                            PRESENCE optional
     ID id-E-DCH-FDD-Information
                                                        CRITICALITY reject EXTENSION E-DCH-FDD-Information
                                                                                                                            PRESENCE optional
     ID id-E-DCH-FDD-Information-to-Modify
                                                                                                                            PRESENCE optional
                                                        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
     ID id-E-DCH-MACdFlows-to-Delete
                                                        CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
                                                                                                                            PRESENCE optional
     ID id-Serving-E-DCH-RL-ID
                                                                                                                            PRESENCE optional
                                                        CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID
     ID id-CPC-Information
                                                        CRITICALITY reject EXTENSION CPC-Information
                                                                                                                            PRESENCE optional
     ID id-NoOfTargetCellHS-SCCH-Order
                                                                                EXTENSION NoOfTargetCellHS-SCCH-Order
                                                                                                                            PRESENCE optional }
                                                        CRITICALITY ignore
     ID id-Additional-HS-Cell-Information-RL-Reconf-Reg
                                                           CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Req
    PRESENCE optional },
Additional-HS-Cell-Information-RL-Reconf-Req ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Req-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Reg-ItemIEs
                                                        ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                    RL-ID,
    c-ID
                                                    C-ID
                                                                                                OPTIONAL,
    hS-DSCH-FDD-Secondary-Serving-Information
                                                    HS-DSCH-FDD-Secondary-Serving-Information
                                                                                               OPTIONAL,
    hS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised
                                                                           HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised
    OPTIONAL,
```

```
hS-DSCH-Secondary-Serving-Remove
                                            HS-DSCH-Secondary-Serving-Remove
                                                                                  OPTIONAL,
   iE-Extensions
                               ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Reg-ExtIEs} } OPTIONAL,
Additional-HS-Cell-Information-RL-Reconf-Reg-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
   ul-TFCS
                                                          OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } 
                                                                                                                  OPTIONAL.
UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
   PRESENCE optional },
   . . .
DL-DPCH-Information-RL-ReconfRgstFDD ::= SEQUENCE {
                                                                              OPTIONAL,
   dl-TFCS
   tFCI-SignallingMode
                                            TFCI-SignallingMode
                                                                              OPTIONAL.
   limitedPowerIncrease
                                            LimitedPowerIncrease
                                                                              OPTIONAL,
   iE-Extensions
                                            OPTIONAL,
DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
   . . .
DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD
DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
   dCH-ID
                                            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 id-RL-InformationItem-RL-ReconfRgstFDD
                                               CRITICALITY reject
                                                                    TYPE RL-InformationItem-RL-ReconfRgstFDD
                                                                                                          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 }
     ID id-RL-Specific-E-DCH-Info
                                    CRITICALITY ignore
                                                           EXTENSION RL-Specific-E-DCH-Info
                                                                                                                PRESENCE optional }
     ID id-F-DPCH-SlotFormat
                                    CRITICALITY reject
                                                           EXTENSION F-DPCH-SlotFormat
                                                                                                                PRESENCE optional },
E-DPCH-Information-RL-ReconfRgstFDD ::= SEQUENCE {
   maxSet-E-DPDCHs
                                    Max-Set-E-DPDCHs
                                                                                                                OPTIONAL,
   ul-PunctureLimit
                                     PunctureLimit
                                                                                                                OPTIONAL,
                                    E-TFCS-Information
   e-TFCS-Information
                                                                                                                OPTIONAL,
   e-TTT
                                    E-TTT
                                                                                                                OPTIONAL,
   e-DPCCH-PO
                                    E-DPCCH-PO
                                                                                                                OPTIONAL,
   e-RGCH-2-IndexStepThreshold
                                     E-RGCH-2-IndexStepThreshold
                                                                                                                OPTIONAL,
   e-RGCH-3-IndexStepThreshold
                                     E-RGCH-3-IndexStepThreshold
                                                                                                                OPTIONAL,
                                    HARQ-Info-for-E-DCH
   hARO-Info-for-E-DCH
                                                                                                                OPTIONAL,
   hSDSCH-Configured-Indicator
                                    HSDSCH-Configured-Indicator
                                                                                                                OPTIONAL,
                                 ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfRgstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL,
E-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-MinimumReducedE-DPDCH-GainFactor
                                                CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor PRESENCE optional },
   . . .
    -- RADIO LINK RECONFIGURATION REQUEST TDD
  RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{RadioLinkReconfigurationRequestTDD-IEs}},
                                                   {{RadioLinkReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                             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-ReconfRgstTDD
                                                             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-ReconfRqstTDD
                                                             CRITICALITY reject TYPE RL-Information-RL-ReconfRqstTDD
                                                                                                                          PRESENCE optional },
-- This RL-Information-RL-ReconfRqstTDD is the first RL information repetition in the RL-Information List. Repetition 2 and on, should be defined
in Multiple-RL-Information-RL-ReconfRqstTDD,
RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-SignallingBearerRequestIndicator
                                                     CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional }
     ID id-multiple-RL-Information-RL-ReconfRgstTDD
                                                                 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
    { ID id-HSDSCH-RNTI
                                                     CRITICALITY reject EXTENSION HSDSCH-RNTI
                                                                                                                    PRESENCE conditional }
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
     ID id-HSPDSCH-RL-ID
                                                     CRITICALITY reject EXTENSION RL-ID
                                                                                                                    PRESENCE optional }
     ID id-E-DCH-Information-Reconfig
                                                     CRITICALITY reject EXTENSION E-DCH-Information-Reconfig
                                                                                                                    PRESENCE optional }
     ID id-E-DCH-Serving-RL-ID
                                                                                                                    PRESENCE optional
                                                     CRITICALITY reject EXTENSION RL-ID
     ID id-E-DCH-768-Information-Reconfig
                                                     CRITICALITY reject EXTENSION E-DCH-768-Information-Reconfig
                                                                                                                    PRESENCE optional }
     ID id-E-DCH-LCR-Information-Reconfig
                                                     CRITICALITY reject EXTENSION E-DCH-LCR-Information-Reconfig
                                                                                                                    PRESENCE optional }
    ID id-PowerControlGAP
                                                     CRITICALITY ignore EXTENSION ControlGAP
                                                                                                                    PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRgstTDD}}
UL-CCTrCH-InformationModifyItemIE-RL-ReconfRgstTDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                                  CCTrCH-ID.
    tFCS
                                                  TFCS
                                                                 OPTIONAL,
    punctureLimit
                                                  PunctureLimit
                                                                 OPTIONAL,
                                                  ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
```

```
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-SIRTarget.
                              CRITICALITY reject
                                                     EXTENSION UL-SIR
                                                                            PRESENCE optional }.
    -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRgstTDD}}
UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::=
    { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                                    CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteItem-RL-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-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRgstTDD}}
DL-CCTrCH-InformationModifyItemIE-RL-ReconfRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID 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.
    t FCS
                                                 TFCS
                                                                OPTIONAL,
   punctureLimit
                                                 PunctureLimit OPTIONAL,
   iE-Extensions
                                                 ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs} }
   OPTIONAL,
    . . .
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional } -- Applicable to 1.28Mcps TDD only
-- This DPCH LCR Information is the for the first RL repetition, DPCH LCR information for RL repetitions 2 and on, should be defined in MultipleRL-
DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD.
    { ID id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                PRESENCE optional }
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
CCTrCH-InformationModifyList-RL-ReconfRgstTDD.
    { ID id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD CRITICALITY ignore EXTENSION DL-Power
                                                                                                                PRESENCE optional }
-- This power Information is the for the first RL repetition, power information for RL repetitions 2 and on, should be defined in MultipleRL-DL-
CCTrCH-InformationModifyList-RL-ReconfRqstTDD.
    { ID id-RL-ID
                                                                                                                PRESENCE optional } |
                                                                    CRITICALITY ignore EXTENSION RL-ID
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-- This is the RL ID for the first RL repetition.
    { ID id-multipleRL-dl-CCTrCH-InformationModifyList-RL-ReconfRgstTDD CRITICALITY reject EXTENSION
                                                                                                                    MultipleRL-DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD PRESENCE optional },
-- This CCTrCH Information is the for the 2nd and beyond RL repetitions.
MultipleRL-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF MultipleRL-DL-CCTrCH-InformationModifyListIE-
RL-ReconfRqstTDD
--Includes the 2nd through the max number of radio link information repetitions.
MultipleRL-DL-CCTrCH-InformationModifyListIE-RL-ReconfRqstTDD ::= SEQUENCE {
    dl-DPCH-LCR-InformationModifyList
                                                                    DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD OPTIONAL,
    cCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD
                                                                    DL-Power
                                                                                                                                OPTIONAL,
    cCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD
                                                                    DL-Power
                                                                                                                                OPTIONAL,
    rL-ID
                                                                    RL-ID
                                                                                                                                OPTIONAL,
    . . .
DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD ::= SEQUENCE {
    dL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
                                                                        DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfRqstTDD
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD
                                                                 ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    maxPowerLCR
                                            DL-Power
                                                        OPTIONAL,
    minPowerLCR
                                            DL-Power
                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRgstTDD-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}
DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRgstTDD NBAP-PROTOCOL-IES ::= {
    ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                                    CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
    PRESENCE mandatory }
```

```
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                            CCTrCH-ID.
   iE-Extensions
                                            ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs} }
   OPTIONAL,
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRgstTDD
DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   dCH-ID
   iE-Extensions
                                            OPTIONAL,
   . . .
DCH-DeleteItem-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
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-ReconfRgstTDD ::= SEQUENCE {
   rL-ID
                                        RL-ID,
   maxDL-Power
                                        DL-Power
                                                      OPTIONAL
   minDL-Power
                                        DL-Power
                                                      OPTIONAL,
   iE-Extensions
                                        OPTIONAL,
RL-InformationItem-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    ID id-RL-Specific-DCH-Info
                                        CRITICALITY ignore
                                                             EXTENSION
                                                                       RL-Specific-DCH-Info
                                                                                                    PRESENCE optional } |
   EXTENSION
                                                                       UL-Synchronisation-Parameters-LCR PRESENCE optional },
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
  ****************
-- RADIO LINK RECONFIGURATION RESPONSE
__ *********************
RadioLinkReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                {{RadioLinkReconfigurationResponse-IEs}},
                       ProtocolExtensionContainer {{RadioLinkReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL,
RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
```

```
id-CRNC-CommunicationContextID
                                                          CRITICALITY ignore
                                                                                  TYPE
                                                                                          CRNC-CommunicationContextID
                                                                                                                                     PRESENCE
   mandatory
           id-RL-InformationResponseList-RL-ReconfRsp
    { ID
                                                          CRITICALITY ignore
                                                                                  TYPE
                                                                                          RL-InformationResponseList-RL-ReconfRsp
                                                                                                                                     PRESENCE
    optional
    { ID
           id-CriticalityDiagnostics
                                                          CRITICALITY ignore
                                                                                  TYPE
                                                                                          CriticalityDiagnostics
                                                                                                                                     PRESENCE
    optional
             },
RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::=
     ID id-TargetCommunicationControlPortID
                                                                      EXTENSION CommunicationControlPortID
                                                                                                                    PRESENCE optional }
                                               CRITICALITY ignore
                                                                                                                    PRESENCE optional }
    { ID id-HSDSCH-FDD-Information-Response
                                               CRITICALITY ignore
                                                                      EXTENSION HSDSCH-FDD-Information-Response
    -- FDD only
    { ID id-HSDSCH-TDD-Information-Response
                                               CRITICALITY ignore
                                                                      EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                    PRESENCE optional }
    -- TDD only
     ID id-E-DCH-Information-Response
                                               CRITICALITY ignore
                                                                      EXTENSION E-DCH-Information-Response
                                                                                                                    PRESENCE optional } |
     ID id-MAChs-ResetIndicator
                                               CRITICALITY ignore
                                                                                                                    PRESENCE optional }
                                                                      EXTENSION MAChs-ResetIndicator
     ID id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                              CRITICALITY ignore
                                                                                                                    EXTENSION
    ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                          PRESENCE optional }
    { ID id-Additional-HS-Cell-Information-Response
                                                      CRITICALITY ignore
                                                                              EXTENSION Additional-HS-Cell-Information-Response-List
    PRESENCE optional },
    . . .
RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-
ReconfRsp } }
RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfRsp CRITICALITY ignore TYPE RL-InformationResponseItem-RL-ReconfRsp PRESENCE mandatory }
RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
                                               RL-ID,
    dCH-InformationResponseList-RL-ReconfRsp
                                               DCH-InformationResponseList-RL-ReconfRsp
                                                                                                                                  OPTIONAL,
                                               iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ID id-DL-PowerBalancing-UpdatedIndicator
                                                       CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
                                                                                                                               PRESENCE optional
} |
    -- FDD only
    { ID id-E-DCH-RL-Set-ID
                                                      CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                               PRESENCE optional
} |
                                                                                                                               PRESENCE optional
     ID id-E-DCH-FDD-DL-Control-Channel-Information
                                                      CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information
    { ID id-E-DCH-FDD-Information-Response
                                                      CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response
                                                                                                                               PRESENCE optional
},
DCH-InformationResponseList-RL-ReconfRsp::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}
```

```
DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
   TYPE DCH-InformationResponse
                                                                           PRESENCE mandatory }
   -- RADIO LINK DELETION REQUEST
RadioLinkDeletionRequest ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                              {{RadioLinkDeletionRequest-IEs}},
                      ProtocolExtensionContainer
                                             {{RadioLinkDeletionRequest-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
RadioLinkDeletionRequest-IES NBAP-PROTOCOL-IES ::= {
         id-NodeB-CommunicationContextID
                                                 CRITICALITY reject TYPE NodeB-CommunicationContextID
                                                                                                      PRESENCE mandatory }
         id-CRNC-CommunicationContextID
                                                 CRITICALITY reject TYPE CRNC-CommunicationContextID
                                                                                                      PRESENCE mandatory }
    ID
                                                 CRITICALITY notify TYPE RL-informationList-RL-DeletionRqst
                                                                                                      PRESENCE mandatory },
         id-RL-informationList-RL-DeletionRqst
   . . .
RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}
RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
   { ID id-RL-informationItem-RL-DeletionRqst
                                                                 TYPE RL-informationItem-RL-DeletionRqst PRESENCE mandatory }
                                          CRITICALITY notify
RL-informationItem-RL-DeletionRqst ::= SEQUENCE
   rL-ID
                                       RL-ID,
   iE-Extensions
                                       OPTIONAL,
-- RADIO LINK DELETION RESPONSE
RadioLinkDeletionResponse ::= SEQUENCE {
                      ProtocolIE-Container
                                              {{RadioLinkDeletionResponse-IEs}},
   protocolIEs
   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 {
                                                     {{DL-PowerControlRequest-IEs}},
   protocolIEs
                          ProtocolIE-Container
   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-PowerAdjustmentType
                                             CRITICALITY ignore TYPE PowerAdjustmentType
                                                                                                                 PRESENCE mandatory }
    { ID id-DLReferencePower
                                             CRITICALITY ignore TYPE DL-Power
                                                                                                                 PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common'
    { ID id-InnerLoopDLPCStatus
                                           CRITICALITY ignore TYPE InnerLoopDLPCStatus
                                                                                                                 PRESENCE optional } |
    { ID id-DLReferencePowerList-DL-PC-Rqst
                                             CRITICALITY ignore TYPE DL-ReferencePowerInformationList-DL-PC-Rgst 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'
                                             CRITICALITY ignore TYPE AdjustmentPeriod
    { ID id-AdiustmentPeriod
                                                                                                                 PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
   { ID id-AdjustmentRatio
                                           CRITICALITY ignore TYPE ScaledAdjustmentRatio
                                                                                                                 PRESENCE conditional },
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DL-ReferencePowerInformationList-DL-PC-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-
ReferencePowerInformationItemIE-DL-PC-Rgst }}
DL-ReferencePowerInformationItemIE-DL-PC-Rqst NBAP-PROTOCOL-IES ::= {
    { ID id-DL-ReferencePowerInformationItem-DL-PC-Rgst
                                                             CRITICALITY ignore
                                                                                       TYPE DL-ReferencePowerInformationItem-DL-PC-Rgst
    PRESENCE mandatory }
DL-ReferencePowerInformationItem-DL-PC-Rqst ::= SEQUENCE {
```

```
rL-ID
                                      RL-ID,
   dl-ReferencePower
                                      DL-Power.
   iE-Extensions
                                      ProtocolExtensionContainer { { DL-ReferencePowerInformationItem-DL-PC-Rgst-ExtIEs } }
DL-ReferencePowerInformationItem-DL-PC-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     *****************
-- DL POWER TIMESLOT CONTROL REQUEST TDD
__ *********************
DL-PowerTimeslotControlRequest ::= SEQUENCE
   protocolIEs
                        ProtocolIE-Container
                                                 {{DL-PowerTimeslotControlRequest-IEs}},
                        ProtocolExtensionContainer
                                                {{DL-PowerTimeslotControlReguest-Extensions}}
   protocolExtensions
                                                                                                       OPTIONAL,
DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID CRITICALITY ignore
                                                           TYPE NodeB-CommunicationContextID
                                                                                                       PRESENCE mandatory } |
    ID id-TimeslotISCPInfo
                                      CRITICALITY ignore
                                                           TYPE DL-TimeslotISCPInfo
                                                                                                       PRESENCE optional },
   -- Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, Not Applicable to 1.28Mcps TDD
DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                   DL-TimeslotISCPInfoLCR
                                                                                                         PRESENCE optional } |
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
   { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD
                                                CRITICALITY ignore
                                                                         EXTENSION PrimaryCCPCH-RSCP
                                                                                                         PRESENCE optional } |
   ID id-PrimaryCCPCH-RSCP-Delta
                                                CRITICALITY ignore
                                                                         EXTENSION PrimaryCCPCH-RSCP-Delta
                                                                                                         PRESENCE optional },
    DEDICATED MEASUREMENT INITIATION REQUEST
     DedicatedMeasurementInitiationRequest ::= SEQUENCE {
                        ProtocolIE-Container
                                             {{DedicatedMeasurementInitiationRequest-IEs}},
   protocolIEs
   protocolExtensions
                        ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
                                                                                                       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 id-NumberOfReportedCellPortions
                                               CRITICALITY reject EXTENSION NumberOfReportedCellPortions
                                                                                                               PRESENCE conditional } |
   -- The IE shall be present if the Dedicated Measurement Type IE is set to 'Best Cell Portions', FDD only.
    { ID id-MeasurementRecoveryBehavior
                                               CRITICALITY ignore EXTENSION MeasurementRecoveryBehavior
                                                                                                                     PRESENCE optional } |
    { ID id-AlternativeFormatReportingIndicator
                                               CRITICALITY ignore EXTENSION AlternativeFormatReportingIndicator
                                                                                                               PRESENCE optional },
   . . .
DedicatedMeasurementObjectType-DM-Rgst ::= CHOICE {
                             RL-DM-Rast,
   rL
   rLS
                             RL-Set-DM-Rast,
                                                   -- for FDD only
                             AllRL-DM-Rast,
   all-RL
   all-RLS
                             AllRL-Set-DM-Rgst,
                                                   -- for FDD only
RL-DM-Rast ::= SEOUENCE {
   rL-InformationList
                                    RL-InformationList-DM-Rqst,
   iE-Extensions
                                    OPTIONAL,
RLItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
RL-InformationList-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rqst }}
RL-InformationItemIE-DM-Rqst NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
RL-InformationItem-DM-Rgst ::= SEQUENCE
       rL-ID
                                    RL-ID,
       dPCH-ID
                                    DPCH-ID
                                                       OPTIONAL, -- for TDD only
       iE-Extensions
                                    OPTIONAL,
RL-InformationItem-DM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-PUSCH-Info-DM-Rqst
                                 CRITICALITY reject
                                                              EXTENSION
                                                                         PUSCH-Info-DM-Rqst
                                                                                                             PRESENCE optional } |
   -- TDD only
   { ID id-HSSICH-Info-DM-Rgst
                                 CRITICALITY reject
                                                              EXTENSION
                                                                         HSSICH-Info-DM-Rast
                                                                                                             PRESENCE optional }
   -- TDD only
   { ID id-DPCH-ID768-DM-Rqst
                                 CRITICALITY reject
                                                              EXTENSION
                                                                         DPCH-ID768
                                                                                                             PRESENCE optional |
   -- 7.68Mcps TDD only
   { ID id-HSSICH-InfoExt-DM-Rqst CRITICALITY reject
                                                                                                             PRESENCE optional },
                                                              EXTENSION
                                                                         HSSICH-InfoExt-DM-Rqst
```

```
-- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
PUSCH-Info-DM-Rgst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
HSSICH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID
HSSICH-InfoExt-DM-Rqst::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF Extended-HS-SICH-ID
-- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
RL-Set-DM-Rqst ::= SEQUENCE {
   rL-Set-InformationList-DM-Rgst
                                      RL-Set-InformationList-DM-Rgst,
   iE-Extensions
                                      ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } }
                                                                                                        OPTIONAL,
RL-SetItem-DM-Rgst-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
   iE-Extensions
                               ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rqst-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
   protocolExtensions
                        ProtocolExtensionContainer
                                                {{DedicatedMeasurementInitiationResponse-Extensions}}
                                                                                                        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
                                                                                                        PRESENCE optional },
                                             CRITICALITY ignore TYPE CriticalityDiagnostics
```

```
DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
                       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,
                             ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } }
  iE-Extensions
                                                                                     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 {
   rI.-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
   -- This PUSCH Information is the for the first PUSCH repetition, PUSCH information for PUSCH repetitions 2 and on, should be defined in
Multiple-PUSCH-InfoList-DM-Rsp.
  { ID id-HSSICH-Info-DM-Rsp
                          CRITICALITY reject
                                                  EXTENSION HS-SICH-ID
                                                                                       PRESENCE optional | |
   -- TDD only
   PRESENCE optional }
   -- Applicable to 3.84Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
   DM-Rsp PRESENCE optional } |
```

```
-- Applicable to 1.28Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
    { ID id-multiple-PUSCH-InfoList-DM-Rsp CRITICALITY ignore EXTENSION Multiple-PUSCH-InfoList-DM-Rsp
                                                                                                                    PRESENCE optional } |
    -- TDD only, This PUSCH information is the for the 2nd and beyond PUSCH repetitions.
    { ID id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp CRITICALITY ignore EXTENSION Multiple-HSSICHMeasurementValueList-TDD-DM-RspPRESENCE
optional }
    -- TDD only. This list of HS-SICH measurement values is used for the 2nd and beyond measurements of a RL when multiple HS-SICH measurement
values need to be reported.
     ID id-DPCH-ID768-DM-Rsp
                                   CRITICALITY reject
                                                                    EXTENSION DPCH-ID768
                                                                                                PRESENCE optional | -- 7.68Mcps TDD only
     ID id-multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp
DM-Rsp PRESENCE optional }|
    -- Applicable to 7.68Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
    {ID id-Extended-HS-SICH-ID
                                   CRITICALITY reject
                                                                    EXTENSION Extended-HS-SICH-ID
                                                                                                                            PRESENCE optional },
    -- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
Multiple-PUSCH-InfoList-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfPUSCHs-1)) OF Multiple-PUSCH-InfoListIE-DM-Rsp
-- Includes the 2nd through the max number of PUSCH information repetitions.
Multiple-PUSCH-InfoListIE-DM-Rsp ::= SEOUENCE {
    pUSCH-ID
                                            PUSCH-ID
                                                                                                                         OPTIONAL,
    dedicatedMeasurementValue
                                            DedicatedMeasurementValue
                                                                                                                         OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Multiple-PUSCH-InfoListIE-DM-Rsp-ExtIEs} } }
                                                                                                                         OPTIONAL,
Multiple-PUSCH-InfoListIE-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multiple-DedicatedMeasurementValueList-TDD-DM-Rsp ::= SEOUENCE (SIZE (1.. maxNrOfDPCHsPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-TDD-DM-
Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp ::= SEQUENCE {
    dPCH-ID
                                        DPCH-ID,
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
                                        ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
    iE-Extensions
Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHsLCRPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-
LCR-TDD-DM-Rsp
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp ::= SEOUENCE {
    dPCH-ID
                                        DPCH-ID,
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
```

```
ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs} }
    iE-Extensions
   OPTIONAL,
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multiple-HSSICHMeasurementValueList-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfHSSICHs-1)) OF Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp ::= SEQUENCE {
    hsSICH-ID
                                        HS-SICH-ID.
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
                                        ProtocolExtensionContainer { { Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
    iE-Extensions
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SICH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SICH-ID
                                                                                                                     PRESENCE optional },
    -- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
    . . .
Multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHs768PerRL-1)) OF Multiple-DedicatedMeasurementValueItem-
768-TDD-DM-Rsp
Multiple-DedicatedMeasurementValueItem-768-TDD-DM-Rsp ::= SEQUENCE {
    dPCH-ID768
                                        DPCH-ID768,
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
    iE-Extensions
                                        ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-768-TDD-DM-Rsp-ExtIEs} }
    OPTIONAL,
    . . .
Multiple-DedicatedMeasurementValueItem-768-TDD-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Rsp ::= SEQUENCE
    rL-Set-InformationList-DM-Rsp
                                        RL-Set-InformationList-DM-Rsp,
    iE-Extensions
                                        ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } }
                                                                                                                       OPTIONAL,
RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}
RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp
                                                CRITICALITY ignore
                                                                        TYPE
                                                                              RL-Set-InformationItem-DM-Rsp
                                                                                                                     PRESENCE mandatory }
```

```
RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
   rL-Set-ID
                                  RL-Set-ID.
   dedicatedMeasurementValue
                                  DedicatedMeasurementValue,
                                                     OPTIONAL.
                                  ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
-- DEDICATED MEASUREMENT INITIATION FAILURE
__ *********************
DedicatedMeasurementInitiationFailure ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{DedicatedMeasurementInitiationFailure-IEs}},
                                                     {{DedicatedMeasurementInitiationFailure-Extensions}}
                          ProtocolExtensionContainer
                                                                                                                  OPTIONAL,
   protocolExtensions
DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
    { ID
                                                  CRITICALITY
                                                                                 TYPE
                                                                                        CRNC-CommunicationContextID
                                                                                                                        PRESENCE mandatory
                                                                 ignore
    { ID
           id-MeasurementID
                                                  CRITICALITY
                                                                 ignore
                                                                                 TYPE
                                                                                        MeasurementID
                                                                                                                        PRESENCE mandatory
     ID
           id-Cause
                                                  CRITICALITY
                                                                 ignore
                                                                                 TYPE
                                                                                        Cause
                                                                                                                        PRESENCE mandatory
   { ID
           id-CriticalityDiagnostics
                                                  CRITICALITY
                                                                 ignore
                                                                                 TYPE
                                                                                        CriticalityDiagnostics
                                                                                                                        PRESENCE optional },
    . . .
DedicatedMeasurementInitiationFailure-Extensions 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
    ID id-DedicatedMeasurementObjectType-DM-Rprt CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rprt
                                                                                                       PRESENCE mandatory
DedicatedMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
                                  RL-DM-Rprt,
   rLS
                                  RL-Set-DM-Rprt,
                                                       -- for FDD only
   all-RL
                                  RL-DM-Rprt,
   all-RLS
                                                       -- for FDD only
                                  RL-Set-DM-Rprt,
RL-DM-Rprt ::= SEQUENCE {
   rL-InformationList-DM-Rprt
                                  RL-InformationList-DM-Rprt,
   iE-Extensions
                                  ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } }
                                                                                                       OPTIONAL,
   . . .
RLItem-DM-Rprt-ExtIEs 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 ::= SEOUENCE {
   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-Rprt
                                                                                                       PRESENCE optional } |
   -- TDD only
   -- This PUSCH Information is the for the first PUSCH repetition, PUSCH information for PUSCH repetitions 2 and on, should be defined in
Multiple-PUSCH-InfoList-DM-Rprt.
   {ID id-HSSICH-Info-DM-Rprt
                               CRITICALITY reject
                                                           EXTENSION HS-SICH-ID
                                                                                                       PRESENCE optional } |
   -- TDD only
   { ID id-multiple-PUSCH-InfoList-DM-Rprt CRITICALITY ignore
                                                           EXTENSION Multiple-PUSCH-InfoList-DM-Rprt
                                                                                                       PRESENCE optional }
   -- TDD only, This PUSCH information is the for the 2nd and beyond PUSCH repetitions.
   { ID id-DPCH-ID768-DM-Rprt
                               CRITICALITY reject
                                                           EXTENSION DPCH-ID768
                                                                                                       PRESENCE optional |
   -- 7.68Mcps TDD only
   { ID id-Extended-HS-SICH-ID
                                                                                                       PRESENCE optional },
                               CRITICALITY ignore
                                                           EXTENSION Extended-HS-SICH-ID
```

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```
-- 1.28Mcps TDD only, used if the HS-SICH identity has a value larger than 31
PUSCH-Info-DM-Rprt ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID
Multiple-PUSCH-InfoList-DM-Rprt ::= SEQUENCE (SIZE (1.. maxNrOfPUSCHs-1)) OF Multiple-PUSCH-InfoListIE-DM-Rprt
-- Includes the 2nd through the max number of PUSCH information repetitions.
Multiple-PUSCH-InfoListIE-DM-Rprt ::= SEQUENCE {
   pUSCH-ID
                                       PUSCH-ID
                                                                                                             OPTIONAL,
   dedicatedMeasurementValue
                                       DedicatedMeasurementValue
                                                                                                             OPTIONAL,
   iE-Extensions
                                       OPTIONAL,
Multiple-PUSCH-InfoListIE-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Rprt ::= SEQUENCE {
   rL-Set-InformationList-DM-Rprt
                                   RL-Set-InformationList-DM-Rprt,
                                   iE-Extensions
                                                                                                          OPTIONAL,
   . . .
RL-SetItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rprt }}
RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
   { ID id-RL-Set-InformationItem-DM-Rprt CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt
                                                                                                          PRESENCE mandatory }
RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
                                RL-Set-ID,
   dedicatedMeasurementValueInformation DedicatedMeasurementValueInformation,
   iE-Extensions
                                ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- DEDICATED MEASUREMENT TERMINATION REQUEST
__ ***********************
DedicatedMeasurementTerminationRequest ::= SEQUENCE {
```

```
{{DedicatedMeasurementTerminationRequest-IEs}},
    protocolIEs
                            ProtocolIE-Container
    protocolExtensions
                            ProtocolExtensionContainer
                                                         {{DedicatedMeasurementTerminationRequest-Extensions}}
                                                                                                                        OPTIONAL,
DedicatedMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
            id-NodeB-CommunicationContextID
                                                     CRITICALITY
                                                                                     TYPE
                                                                                             NodeB-CommunicationContextID
                                                                                                                               PRESENCE mandatory
                                                                     ignore
     ID
           id-MeasurementID
                                                     CRITICALITY
                                                                     ignore
                                                                                     TYPE
                                                                                             Measurement TD
                                                                                                                               PRESENCE mandatory
    . . .
DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  DEDICATED MEASUREMENT FAILURE INDICATION
DedicatedMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs
                            ProtocolIE-Container
                                                         {{DedicatedMeasurementFailureIndication-IEs}},
    protocolExtensions
                                                        {{DedicatedMeasurementFailureIndication-Extensions}}
                            ProtocolExtensionContainer
                                                                                                                        OPTIONAL,
DedicatedMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::=
           id-CRNC-CommunicationContextID
                                                                                      CRNC-CommunicationContextID
                                                 CRITICALITY
                                                                 ignore
                                                                             TYPE
                                                                                                                         PRESENCE mandatory
      ID
           id-MeasurementID
                                                 CRITICALITY
                                                                 ignore
                                                                             TYPE
                                                                                     MeasurementID
                                                                                                                         PRESENCE mandatory
     ID
           id-Cause
                                                 CRITICALITY
                                                                             TYPE
                                                                                                                         PRESENCE mandatory
                                                                 ignore
                                                                                      Cause
    . . .
DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK FAILURE INDICATION
RadioLinkFailureIndication ::= SEQUENCE {
    protocolIEs
                            ProtocolIE-Container
                                                         {{RadioLinkFailureIndication-IEs}},
    protocolExtensions
                            ProtocolExtensionContainer
                                                         {{RadioLinkFailureIndication-Extensions}}
                                                                                                                        OPTIONAL,
RadioLinkFailureIndication-IES NBAP-PROTOCOL-IES ::= {
    { ID
           id-CRNC-CommunicationContextID
                                                         CRITICALITY ignore
                                                                                     TYPE CRNC-CommunicationContextID
                                                                                                                               PRESENCE mandatory
```

```
id-Reporting-Object-RL-FailureInd
    { ID
                                                      CRITICALITY ignore
                                                                                 TYPE Reporting-Object-RL-FailureInd
                                                                                                                        PRESENCE mandatory
RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Reporting-Object-RL-FailureInd ::= CHOICE {
                          RL-RL-FailureInd,
    rL-Set
                          RL-Set-RL-FailureInd, --FDD only
    . . . ,
    cCTrCH
                          CCTrCH-RL-FailureInd --TDD only
RL-RL-FailureInd ::= SEQUENCE {
    rL-InformationList-RL-FailureInd
                                          RL-InformationList-RL-FailureInd,
                                          iE-Extensions
                                                                                                                  OPTIONAL,
RLItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-FailureInd ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}
RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-FailureInd
                                                                                 TYPE RL-InformationItem-RL-FailureInd
                                                                                                                           PRESENCE mandatory }
                                                      CRITICALITY ignore
RL-InformationItem-RL-FailureInd ::= SEOUENCE {
    rL-ID
                                              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.
                                          ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } }
   iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
FailureInd }}
RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-RL-FailureInd
                                                 CRITICALITY ignore
                                                                          TYPE RL-Set-InformationItem-RL-FailureInd
                                                                                                                       PRESENCE mandatory
RL-Set-InformationItem-RL-FailureInd ::= SEOUENCE {
   rL-Set-ID
                           RL-Set-ID,
   cause
   iE-Extensions
                           ProtocolExtensionContainer { { RL-Set-InformationItem-RL-FailureInd-ExtIEs} } OPTIONAL,
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 ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd}}
CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-FailureInd
                                                      CRITICALITY ignore
                                                                              TYPE CCTrCH-InformationItem-RL-FailureInd
                                                                                                                             PRESENCE mandatory }
CCTrCH-InformationItem-RL-FailureInd ::= SEOUENCE {
   cCTrCH-ID
                                               CCTrCH-ID,
   cause
                                               Cause,
   iE-Extensions
                                               ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } }
                                                                                                                               OPTIONAL,
CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK PREEMPTION REQUIRED INDICATION
__ *********************
RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
```

```
{{RadioLinkPreemptionRequiredIndication-IEs}},
   protocolIEs
                             ProtocolIE-Container
   protocolExtensions
                             ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
                                                                                                            OPTIONAL,
RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
    ID id-CRNC-CommunicationContextID
                                             CRITICALITY ignore TYPE CRNC-CommunicationContextID
                                                                                                     PRESENCE mandatory }
   PRESENCE optional },
RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
PreemptRequiredInd}}
RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
                                           CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd PRESENCE mandatory },
   { ID id-RL-InformationItem-RL-PreemptRequiredInd
   . . .
RL-InformationItem-RL-PreemptRequiredInd::= SEQUENCE {
   rL-ID
                         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
         id-Reporting-Object-RL-RestoreInd
                                          CRITICALITY ignore TYPE Reporting-Object-RL-RestoreInd
                                                                                                PRESENCE mandatory
RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
Reporting-Object-RL-RestoreInd ::= CHOICE {
                       RL-RL-RestoreInd, --TDD only
   rL-Set
                       RL-Set-RL-RestoreInd, --FDD only
   . . . ,
   cCTrCH
                       CCTrCH-RL-RestoreInd --TDD only
RL-RL-RestoreInd ::= SEQUENCE {
                                    RL-InformationList-RL-RestoreInd,
   rL-InformationList-RL-RestoreInd
                                     iE-Extensions
                                                                                                   OPTIONAL,
   . . .
RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationItemIE-RL-RestoreInd}}
RL-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationItem-RL-RestoreInd
                                           CRITICALITY ignore
                                                               TYPE
                                                                    RL-InformationItem-RL-RestoreInd
                                                                                                         PRESENCE mandatory }
RL-InformationItem-RL-RestoreInd ::= SEOUENCE {
                                     RL-ID,
   iE-Extensions
                                     RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-RL-RestoreInd ::= SEOUENCE {
   rL-Set-InformationList-RL-RestoreInd
                                    RL-Set-InformationList-RL-RestoreInd,
   iE-Extensions
                                     OPTIONAL,
RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-RestoreInd ::= SEOUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
RestoreInd }}
RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory }
RL-Set-InformationItem-RL-RestoreInd ::= SEQUENCE {
   rL-Set-ID
                       RL-Set-ID,
   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
                                       ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }
   iE-Extensions
                                                                                                         OPTIONAL,
   . . .
CCTrCHItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
RestoreInd}}
CCTrCH-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   { ID id-CCTrCH-InformationItem-RL-RestoreInd
                                            CRITICALITY ignore TYPE CCTrCH-InformationItem-RL-RestoreInd
                                                                                                         PRESENCE mandatory }
CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE
   cCTrCH-ID
   iE-Extensions
                                          OPTIONAL,
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *******************
  COMPRESSED MODE COMMAND FDD
  *****************
CompressedModeCommand ::= SEQUENCE {
                                                 {{CompressedModeCommand-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}
   protocolExtensions
                                                                                                  OPTIONAL,
CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-NodeB-CommunicationContextID
                                              CRITICALITY ignore
                                                                   TYPE NodeB-CommunicationContextID
                                                                                                           PRESENCE mandatory }
```

```
{ ID id-Active-Pattern-Sequence-Information
                                           CRITICALITY ignore
                                                               TYPE Active-Pattern-Sequence-Information
                                                                                                      PRESENCE mandatory },
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
                                                                   TYPE
                                                                          CRNC-CommunicationContextID
                                        CRITICALITY
                                                     ignore
                                                                                                      PRESENCE optional
         id-NodeB-CommunicationContextID
                                                     ignore
                                                                          NodeB-CommunicationContextID
                                                                                                      PRESENCE optional
                                        CRITICALITY
                                                                   TYPE
    ID
         id-Cause
                                        CRITICALITY
                                                      ignore
                                                                   TYPE
                                                                                                      PRESENCE optional
    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 ::= SEQUENCE {
                                                    {{PhysicalSharedChannelReconfigurationRequestFDD-IEs}},
    protocolIEs
                        ProtocolIE-Container
    protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestFDD-Extensions}}
PhysicalSharedChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                                            CRITICALITY reject TYPE C-ID
                                                                                                                                PRESENCE mandatory
    { ID id-ConfigurationGenerationID
                                                            CRITICALITY reject TYPE ConfigurationGenerationID
                                                                                                                                PRESENCE mandatory
} |
     ID id-SFN
                                                            CRITICALITY reject TYPE SFN
                                                                                                                                PRESENCE optional } |
     ID id-HS-PDSCH-HS-SCCH-E-AGCH-E-RGCH-E-HICH-MaxPower-PSCH-ReconfRgst
                                                                                CRITICALITY reject
                                                                                                                    TYPE MaximumTransmissionPower
                PRESENCE optional } |
     ID id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRgst CRITICALITY reject TYPE DL-ScramblingCode
                                                                                                                                PRESENCE optional }
     ID id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst CRITICALITY reject TYPE HS-PDSCH-FDD-Code-Information
                                                                                                                                PRESENCE optional
     ID id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRgst
                                                                                                                                PRESENCE optional },
                                                            CRITICALITY reject TYPE HS-SCCH-FDD-Code-Information
PhysicalSharedChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                                CRITICALITY reject EXTENSION DL-ScramblingCode
    PRESENCE optional }
    { ID id-E-AGCH-FDD-Code-Information
                                                                    CRITICALITY reject EXTENSION E-AGCH-FDD-Code-Information
    PRESENCE optional } |
    { ID id-E-RGCH-E-HICH-FDD-Code-Information
                                                                    CRITICALITY reject EXTENSION E-RGCH-E-HICH-FDD-Code-Information
    PRESENCE optional } |
    {ID id-HSDPA-And-EDCH-CellPortion-Information-PSCH-ReconfRqst
                                                                    CRITICALITY reject EXTENSION HSDPA-And-EDCH-CellPortion-InformationList-PSCH-
ReconfRast
                PRESENCE optional } |
    {ID id-Maximum-Target-ReceivedTotalWideBandPower
                                                                    CRITICALITY reject EXTENSION Maximum-Target-ReceivedTotalWideBandPower
    PRESENCE optional } |
    {ID id-Reference-ReceivedTotalWideBandPower
                                                                    CRITICALITY ignore EXTENSION Reference-ReceivedTotalWideBandPower
         PRESENCE optional } |
    {ID id-Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio
                                                                    CRITICALITY reject EXTENSION Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio
        PRESENCE optional }
    { ID id-HSDSCH-Common-System-InformationFDD
                                                                    CRITICALITY reject EXTENSION HSDSCH-Common-System-InformationFDD
    PRESENCE optional } |
    { ID id-Common-MACFlows-to-DeleteFDD
                                                        CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteFDD
    PRESENCE optional } |
    { ID id-HSDSCH-Paging-System-InformationFDD
                                                            CRITICALITY reject EXTENSION HSDSCH-Paging-System-InformationFDD
    PRESENCE optional } |
    { ID id-Paging-MACFlows-to-DeleteFDD
                                                        CRITICALITY reject EXTENSION Paging-MACFlows-to-DeleteFDD
    PRESENCE optional } |
    { ID id-Common-EDCH-System-InformationFDD
                                                            CRITICALITY reject EXTENSION Common-EDCH-System-InformationFDD
        PRESENCE optional } |
    { ID id-Common-UL-MACFlows-to-DeleteFDD
                                                        CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteFDD
    PRESENCE optional }
    { ID id-Common-EDCH-MACdFlows-to-DeleteFDD
                                                                CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete
    PRESENCE optional }
    { ID id-Enhanced-UE-DRX-InformationFDD
                                                        CRITICALITY reject EXTENSION Enhanced-UE-DRX-InformationFDD
    PRESENCE optional },
```

```
HSDPA-And-EDCH-CellPortion-InformationList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HSDPA-And-EDCH-CellPortion-
InformationItem-PSCH-ReconfRast
HSDPA-And-EDCH-CellPortion-InformationItem-PSCH-ReconfRqst::= SEQUENCE {
                                                                        CellPortionID,
    cellPortionID
   hS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst
                                                                        DL-ScramblingCode
                                                                                                                       OPTIONAL,
    hS-PDSCH-FDD-Code-Information-PSCH-ReconfRgst
                                                                        HS-PDSCH-FDD-Code-Information
                                                                                                                       OPTIONAL,
    hS-SCCH-FDD-Code-Information-PSCH-ReconfRqst
                                                                        HS-SCCH-FDD-Code-Information
                                                                                                                       OPTIONAL,
    hs-pdsch-Hs-scch-e-Agch-e-Rgch-e-Hich-MaxPower-Psch-Reconfrqst
                                                                        MaximumTransmissionPower
                                                                                                                       OPTIONAL,
    e-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                                        DL-ScramblingCode
                                                                                                                       OPTIONAL,
    e-AGCH-FDD-Code-Information
                                                                        E-AGCH-FDD-Code-Information
                                                                                                                       OPTIONAL,
    e-RGCH-E-HICH-FDD-Code-Information
                                                                        E-RGCH-E-HICH-FDD-Code-Information
                                                                                                                       OPTIONAL.
    iE-Extensions
                                                                        ProtocolExtensionContainer { { HSDPA-And-EDCH-CellPortion-InformationItem-
PSCH-ReconfRqst-ExtIEs} }
                           OPTIONAL.
HSDPA-And-EDCH-CellPortion-InformationItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
                                                     {PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
    protocolIEs
                        ProtocolIE-Container
    protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}
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-ReconfRgst
                                                                                                                       PRESENCE optional
                                                    CRITICALITY reject TYPE PDSCHSets-AddList-PSCH-ReconfRqst
     ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst
                                                    CRITICALITY reject TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst
                                                                                                                       PRESENCE optional
      ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst
                                                    CRITICALITY reject TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst
                                                                                                                       PRESENCE optional
     ID id-PUSCHSets-AddList-PSCH-ReconfRgst
                                                    CRITICALITY reject TYPE PUSCHSets-AddList-PSCH-ReconfRqst
                                                                                                                       PRESENCE optional
     ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                    CRITICALITY reject TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                                                                                       PRESENCE optional
     ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst
                                                    CRITICALITY reject TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst
                                                                                                                       PRESENCE optional },
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::=
                                                                CRITICALITY reject EXTENSION HS-PDSCH-TDD-Information-PSCH-ReconfRqst
    { ID id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst
    PRESENCE optional }
    { ID id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
                                                                CRITICALITY reject EXTENSION Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRgst
    PRESENCE optional }
    { ID id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
                                                                CRITICALITY reject EXTENSION Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRgst
    PRESENCE optional } |
```

```
PRESENCE optional } |
     ID id-ConfigurationGenerationID
                                                         CRITICALITY reject EXTENSION ConfigurationGenerationID
     ID id-E-PUCH-Information-PSCH-ReconfRgst
                                                                         CRITICALITY reject EXTENSION E-PUCH-Information-PSCH-ReconfRqst
                                              PRESENCE optional } |
    { ID id-Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst
                                                                         CRITICALITY reject EXTENSION Add-To-E-AGCH-Resource-Pool-PSCH-
ReconfRast
                           PRESENCE optional }
    { ID id-Modify-E-AGCH-Resource-Pool-PSCH-ReconfRast
                                                                         CRITICALITY reject EXTENSION Modify-E-AGCH-Resource-Pool-PSCH-
ReconfRast
                                          PRESENCE optional } |
    { ID id-Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRqst
                                                                         CRITICALITY reject EXTENSION Delete-From-E-AGCH-Resource-Pool-PSCH-
ReconfRast
                                          PRESENCE optional }
    { ID id-E-HICH-Information-PSCH-ReconfRqst
                                                                         CRITICALITY reject EXTENSION E-HICH-Information-PSCH-ReconfRqst
       PRESENCE optional }
    ID id-Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells
                                                                         CRITICALITY reject EXTENSION Maximum-Generated-
ReceivedTotalWideBandPowerInOtherCells
                                          PRESENCE optional \| -- Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
                                                                         CRITICALITY reject EXTENSION E-PUCH-Information-768-PSCH-ReconfRqst
    { ID id-E-PUCH-Information-768-PSCH-ReconfRqst
                                              PRESENCE optional } |
    { ID id-Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRgst
                                                                         CRITICALITY reject EXTENSION Add-To-E-AGCH-Resource-Pool-768-PSCH-
                   PRESENCE optional } |
ReconfRast
    { ID id-Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRgst
                                                                                                               EXTENSION Modify-E-AGCH-
                                                                             CRITICALITY reject
Resource-Pool-768-PSCH-ReconfRqst
                                                                 PRESENCE optional } |
    { ID id-E-HICH-Information-768-PSCH-ReconfRqst
                                                                         CRITICALITY reject EXTENSION E-HICH-Information-768-PSCH-ReconfRqst
           PRESENCE optional } |
    { ID id-E-PUCH-Information-LCR-PSCH-ReconfRast
                                                                         CRITICALITY reject EXTENSION E-PUCH-Information-LCR-PSCH-ReconfRgst
                                              PRESENCE optional } |
    { ID id-Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                                         CRITICALITY reject EXTENSION Add-To-E-AGCH-Resource-Pool-LCR-PSCH-
ReconfRast
                   PRESENCE optional }
    { ID id-Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRgst
                                                                         CRITICALITY reject EXTENSION Modify-E-AGCH-Resource-Pool-LCR-PSCH-
ReconfRast
                                          PRESENCE optional }
    { ID id-Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                             CRITICALITY reject EXTENSION Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst
       PRESENCE optional }
    { ID id-Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst
                                                             CRITICALITY reject EXTENSION Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst
       PRESENCE optional }
    { ID id-Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRqst
                                                                 CRITICALITY reject EXTENSION Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRqst
                                  PRESENCE optional } |
    { ID id-SYNC-UL-Partition-LCR
                                                                         CRITICALITY reject EXTENSION SYNC-UL-Partition-LCR
                              PRESENCE optional }
    -- Applicable to 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-Maximum-Target-ReceivedTotalWideBandPower-LCR
                                                                         CRITICALITY reject EXTENSION Maximum-Target-
ReceivedTotalWideBandPower-LCR
                                                  PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only.
    { ID id-Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRqst
                                                                 CRITICALITY reject
                                                                                        EXTENSION Delete-From-HS-SCCH-Resource-PoolExt-PSCH-
ReconfRast
               PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxNrOfHSSCCHs HS-SCCHs in the message.
    { ID id-HSDSCH-Common-System-InformationLCR
                                                                 CRITICALITY reject EXTENSION HSDSCH-Common-System-InformationLCR
    PRESENCE optional }
    { ID id-Common-MACFlows-to-DeleteLCR
                                                                 CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteLCR
       PRESENCE optional }
    { ID id-HSDSCH-Paging-System-InformationLCR
                                                                 CRITICALITY reject EXTENSION HSDSCH-Paging-System-InformationLCR
    PRESENCE optional } |
    { ID id-Paging-MACFlows-to-DeleteLCR
                                                                 CRITICALITY reject EXTENSION Paging-MACFlows-to-DeleteLCR
       PRESENCE optional }
    { ID id-Common-EDCH-System-InformationLCR
                                                                 CRITICALITY reject EXTENSION Common-EDCH-System-InformationLCR
       PRESENCE optional }
```

```
{ ID id-Common-UL-MACFlows-to-DeleteLCR
                                                                    CRITICALITY reject EXTENSION Common-MACFlows-to-DeleteLCR
       PRESENCE optional } |
     ID id-Common-EDCH-MACdFlows-to-DeleteLCR
                                                                    CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-DeleteLCR
       PRESENCE optional }
    { ID id-Enhanced-UE-DRX-InformationLCR
                                                                    CRITICALITY reject EXTENSION Enhanced-UE-DRX-InformationLCR
        PRESENCE optional },
PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst
PDSCHSets-AddItem-PSCH-ReconfRqst
                                   ::= SEQUENCE {
    pDSCHSet-ID
                                                PDSCHSet-ID.
    pDSCH-InformationList
                                                PDSCH-Information-AddList-PSCH-ReconfRgst OPTIONAL,
                                                                                                                    -- Mandatory for 3.84Mcps TDD.
Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
    iE-Extensions
                                                ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                            OPTIONAL,
    . . .
PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst
                                                       CRITICALITY reject
                                                                                EXTENSION PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
               optional \ -- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.
    {ID id-PDSCH-AddInformation-768-PSCH-ReconfRqst
                                                      CRITICALITY reject
                                                                                EXTENSION PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst
               optional . -- Mandatory for 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
    PRESENCE
PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}
-- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
PDSCH-Information-AddListIEs-PSCH-ReconfRgst
                                               NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject
                                                                                TYPE
                                                                                        PDSCH-Information-AddItem-PSCH-ReconfRqst
                                                                                                                                        PRESENCE
    mandatory}
PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-PSCH-ReconfRqst
                                                               DL-Timeslot-InformationAddList-PSCH-ReconfRgst,
                                            ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                  OPTIONAL,
PDSCH-Information-AddItem-PSCH-ReconfRgst-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
```

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```
dL-Code-InformationAddList-PSCH-ReconfRqst
                                                          DL-Code-InformationAddList-PSCH-ReconfRqst,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                   OPTIONAL.
    . . .
DL-Timeslot-InformationAddItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst
DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode.
   iE-Extensions
                                          OPTIONAL,
DL-Code-InformationAddItem-PSCH-ReconfRgst-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,
   iE-Extensions
                                              ProtocolExtensionContainer { { PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                              CRITICALITY reject
{ID id-Tstd-indicator
                                                     EXTENSION TSTD-Indicator
                                                                                     PRESENCE
                                                                                                                optional },
    -- Applicable to 1.28Mcps TDD only
   . . .
DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst
DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
                                          TFCI-Presence,
   tFCT-Presence
   dL-Code-InformationAddList-LCR-PSCH-ReconfRgst
                                                             DL-Code-InformationAddList-LCR-PSCH-ReconfRgst,
                                          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-ReconfRgst ::= SEQUENCE {
   pDSCH-ID
                                          PDSCH-ID.
    tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR
                                          ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                    OPTIONAL,
DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    {ID id-PDSCH-Timeslot-Format-PSCH-ReconfRqst-LCR
                                                    CRITICALITY reject
                                                                             EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR
                                                                                                                        PRESENCE optional },
    . . .
PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
    tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-768-PSCH-ReconfRgst
                                                                  DL-Timeslot-InformationAddList-768-PSCH-ReconfRqst,
                                              ProtocolExtensionContainer { {PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
PDSCH-AddInformation-768-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationAddList-768-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-768-PSCH-ReconfRgst
DL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlot
                                          TimeSlot,
   midambleShiftAndBurstType768
                                          MidambleShiftAndBurstType768,
   tFCI-Presence
                                          TFCI-Presence,
   dL-Code-InformationAddList-768-PSCH-ReconfRgst
                                                             DL-Code-InformationAddList-768-PSCH-ReconfRgst,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
DL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationAddList-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationAddItem-768-PSCH-ReconfRqst
DL-Code-InformationAddItem-768-PSCH-ReconfRgst ::= SEOUENCE {
   pDSCH-ID768
                                          PDSCH-ID768,
   tdd-ChannelisationCode768
                                          TDD-ChannelisationCode768,
   iE-Extensions
                                          OPTIONAL,
DL-Code-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst
PDSCHSets-ModifyItem-PSCH-ReconfRgst
                                     ::= SEQUENCE {
   pDSCHSet-ID
                                            PDSCHSet-ID,
                                            PDSCH-Information-ModifyList-PSCH-ReconfRqst,
   pDSCH-InformationList
   iE-Extensions
                                            OPTIONAL,
PDSCHSets-ModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-ModifyInformation-768-PSCH-ReconfRqst CRITICALITY reject
                                                                         EXTENSION PDSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRgst
                    optional \, -- For 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
PDSCH-Information-ModifyList-PSCH-ReconfRgst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRgst }}
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-ReconfRqst
   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
                                                                                                            OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                             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,
   midambleShiftAndBurstTvpe
                                               MidambleShiftAndBurstTvpe
                                                                                                            OPTIONAL,
   tFCI-Presence
                                               TFCI-Presence
                                                                                                            OPTIONAL,
   dL-Code-InformationModifyList-PSCH-ReconfRgst
                                                          DL-Code-InformationModifyList-PSCH-ReconfRqst
   iE-Extensions
                                        ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
   . . .
DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst
DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID
                                          PDSCH-ID.
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   iE-Extensions
                                          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,
   iE-Extensions
                                              ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-LCR-InformationModifyItem-PSCH-
ReconfRast
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 ::= {
    EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR
                                                                                                                         PRESENCE optional },
PDSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                              RepetitionPeriod
                                                                                                                      OPTIONAL,
    repetitionLength
                                                              RepetitionLength
                                                                                                                      OPTIONAL,
    tdd-PhysicalChannelOffset
                                                              TDD-PhysicalChannelOffset
                                                                                                                      OPTIONAL,
    dL-Timeslot-768-InformationModifyList-PSCH-ReconfRgst
                                                              DL-Timeslot-768-InformationModifyList-PSCH-ReconfRgst
                                                                                                                      OPTIONAL.
   iE-Extensions
                                              ProtocolExtensionContainer { {PDSCH-ModifyInformation-768-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
PDSCH-ModifyInformation-768-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-768-InformationModifyItem-PSCH-
ReconfRast
DL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlot
   midambleShiftAndBurstType768
                                                          MidambleShiftAndBurstType768
                                                                                                                                     OPTIONAL,
    tFCI-Presence
                                                          TFCI-Presence
                                                                                                                                     OPTIONAL,
    dL-Code-768-InformationModifyList-PSCH-ReconfRqst
                                                          DL-Code-768-InformationModifyList-PSCH-ReconfRqst
                                                                                                                                  OPTIONAL,
                                          ProtocolExtensionContainer { { DL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-768-InformationModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1...maxNrOfPDSCHs)) OF DL-Code-768-InformationModifyList-PSCH-ReconfRgst
DL-Code-768-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE
   pDSCH-ID768
                                           PDSCH-ID768,
   tdd-ChannelisationCode768
                                           TDD-ChannelisationCode768,
                                           ProtocolExtensionContainer { { DL-Code-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
DL-Code-768-InformationModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst
```

```
PDSCHSets-DeleteItem-PSCH-ReconfRqst
                                       ::= SEQUENCE {
    pDSCHSet-ID
                                              PDSCHSet-ID.
   iE-Extensions
                                              OPTIONAL.
PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst
PUSCHSets-AddItem-PSCH-ReconfRqst
                                  ::= SEQUENCE {
   pUSCHSet-ID
   pUSCH-InformationList
                                              PUSCH-Information-AddList-PSCH-ReconfRgst OPTIONAL,
    -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD
                                              ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } }
   iE-Extensions
                                                                                                                        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
               optional | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-PUSCH-AddInformation-768-PSCH-ReconfRqst CRITICALITY reject
                                                                             EXTENSION PUSCH-AddInformation-768-AddItem-PSCH-ReconfRqst
    PRESENCE optional }, -- Mandatory for 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }}
PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
     ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst
                                                                                                                           PRESENCE mandatory
PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                  RepetitionPeriod,
                                                  RepetitionLength,
    repetitionLength
    tdd-PhysicalChannelOffset
                                                  TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PSCH-ReconfRgst UL-Timeslot-InformationAddList-PSCH-ReconfRgst,
                                                  ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
    . . .
PUSCH-Information-AddItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst
UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlot
                                              TimeSlot,
   midambleShiftAndBurstType
                                              MidambleShiftAndBurstType,
    tFCI-Presence
                                              TFCI-Presence,
```

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uL-Code-InformationAddList-PSCH-ReconfRqst UL-Code-InformationAddList-PSCH-ReconfRqst,
        iE-Extensions
                                                                                                ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRgst-ExtIEs} }
        OPTIONAL.
UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst
UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
        pUSCH-ID
                                                                                        PUSCH-ID,
        tdd-ChannelisationCode
                                                                                        TDD-ChannelisationCode
        iE-Extensions
                                                                                        ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                                                                                                                                                      OPTIONAL,
UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
        repetitionPeriod
                                                                                                                RepetitionPeriod,
        repetitionLength
                                                                                                                 RepetitionLength,
                                                                                                                TDD-PhysicalChannelOffset,
        tdd-PhysicalChannelOffset
        \verb"uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst" UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst", and the property of the property 
                                                                                                ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRgst-ExtIEs} }
        iE-Extensions
        OPTIONAL,
        . . .
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfULTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRgst
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
        timeSlotLCR
                                                                                                         TimeSlotLCR,
        midambleShiftLCR
                                                                                                        MidambleShiftLCR,
        tFCI-Presence
                                                                                                         TFCI-Presence,
        uL-Code-InformationAddList-LCR-PSCH-ReconfRqst UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
                                                                                        ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
        iE-Extensions
        OPTIONAL,
        . . .
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst
```

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UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID
                                            PUSCH-ID.
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                          OPTIONAL.
UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-Timeslot-Format-PSCH-ReconfRqst-LCR
                                                      CRITICALITY reject
                                                                                 EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR
                                                                                                                             PRESENCE optional },
PUSCH-AddInformation-768-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
                                                        RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                                        RepetitionLength,
    tdd-PhysicalChannelOffset
                                                        TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-768-PSCH-ReconfRgst UL-Timeslot-InformationAddList-768-PSCH-ReconfRgst,
                                                ProtocolExtensionContainer { {PUSCH-AddInformation-768-AddItem-PSCH-ReconfRgst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
PUSCH-AddInformation-768-AddItem-PSCH-ReconfRgst-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationAddList-768-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-768-PSCH-ReconfRgst
UL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot
                                                    TimeSlot,
    midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
    tFCI-Presence
                                                    TFCI-Presence,
    uL-Code-InformationAddList-768-PSCH-ReconfRqst UL-Code-InformationAddList-768-PSCH-ReconfRqst,
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
    OPTIONAL,
UL-Timeslot-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationAddItem-768-PSCH-ReconfRqst
UL-Code-InformationAddItem-768-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID
                                            PUSCH-ID.
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
   iE-Extensions
                                            ProtocolExtensionContainer { { UL-Code-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                          OPTIONAL,
    . . .
UL-Code-InformationAddItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst
PUSCHSets-ModifyItem-PSCH-ReconfRqst
                                       ::= SEOUENCE {
    pUSCHSet-ID
                                              PUSCHSet-ID,
   pUSCH-InformationList
                                              PUSCH-Information-ModifyList-PSCH-ReconfRqst,
   iE-Extensions
                                              PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-768-PSCH-ReconfRgst CRITICALITY reject
                                                                             EXTENSION PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRqst
                       optional }, -- For 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
PUSCH-Information-ModifyList-PSCH-ReconfRgst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRgst }}
PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject
                                                                                 TYPE PUSCH-Information-ModifyItem-PSCH-ReconfRqst
                                                                                                                                       PRESENCE
    {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-ReconfRqst UL-Timeslot-InformationModifyList-PSCH-ReconfRqst
                                              ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationModifyList-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRgst
UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot
                                                  TimeSlot,
                                                  MidambleShiftAndBurstType
   midambleShiftAndBurstType
                                                                                                                OPTIONAL,
   tFCI-Presence
                                                  TFCI-Presence
                                                                                                                OPTIONAL,
                                                                                                                   OPTIONAL,
   uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   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,
                                          ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                          RepetitionPeriod
                                                                                                               OPTIONAL,
    repetitionLength
                                                          RepetitionLength
                                                                                                               OPTIONAL,
    tdd-PhysicalChannelOffset
                                                          TDD-PhysicalChannelOffset
                                                                                                               OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRgst UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRgst OPTIONAL,
                                              ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEOUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModifyItem-PSCH-
ReconfRast
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlotLCR
                                                      TimeSlotLCR,
   midambleShiftLCR
                                                     MidambleShiftLCR
                                                                                                               OPTIONAL,
   tFCI-Presence
                                                      TFCI-Presence
                                                                                                               OPTIONAL,
   uL-Code-LCR-InformationModifyList-PSCH-ReconfRqst UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                                                               OPTIONAL,
   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-ReconfRqst ::= SEQUENCE {
   pUSCH-ID
                                          PUSCH-ID,
   tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR
   iE-Extensions
                                          OPTIONAL,
```

```
UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR
                                                                                                                         PRESENCE optional },
PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                                          RepetitionPeriod
                                                                                                                 OPTIONAL,
    repetitionLength
                                                          RepetitionLength
                                                                                                                 OPTIONAL,
    tdd-PhysicalChannelOffset
                                                          TDD-PhysicalChannelOffset
                                                                                                                 OPTIONAL,
   uL-Timeslot-InformationModifyList-768-PSCH-ReconfRqst UL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
                                              ProtocolExtensionContainer { {PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
PUSCH-ModifyInformation-768-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-768-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-768-InformationModifyItem-PSCH-
ReconfRqst
UL-Timeslot-768-InformationModifyItem-PSCH-ReconfRast ::= SEOUENCE {
   timeSlot
                                                      TimeSlot,
   midambleShiftAndBurstType768
                                                      MidambleShiftAndBurstType768
                                                                                                                            OPTIONAL,
   tFCI-Presence
                                                      TFCI-Presence
   OPTIONAL,
   uL-Code-768-InformationModifyList-PSCH-ReconfRgst UL-Code-768-InformationModifyList-PSCH-ReconfRgst
                                          ProtocolExtensionContainer { { UL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
UL-Timeslot-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-768-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-768-InformationModifyItem-PSCH-ReconfRqst
UL-Code-768-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID
                                          PUSCH-ID,
   tdd-ChannelisationCode768
                                          TDD-ChannelisationCode768,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-Code-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
UL-Code-768-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst
```

```
::= SEQUENCE {
PUSCHSets-DeleteItem-PSCH-ReconfRqst
    pUSCHSet-ID
                                                PUSCHSet-ID.
    iE-Extensions
                                                ProtocolExtensionContainer { {PUSCHSets-DeleteItem-PSCH-ReconfRast-ExtIEs} }
PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-PDSCH-TDD-Information-PSCH-ReconfRqst ::= SEQUENCE {
    dL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst
                                                                        DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst
                                                                                                                                OPTIONAL,
    dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                        DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                                                                               OPTIONAL.
    -- This HS-PDSCH Timeslot Information is for the first Frequency repetition, HS-PDSCH Timeslot information for Frequency repetitions 2 and on,
should be defined in MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst
    iE-Extensions
                                                ProtocolExtensionContainer { { HS-PDSCH-TDD-Information-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                     OPTIONAL,
    . . .
HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-dL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRqst
                                                                                                CRITICALITY reject
                                                                                                                      EXTENSION DL-HS-PDSCH-
                                                   PRESENCE optional } -- For 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
Timeslot-Information-768-PSCH-ReconfRqst
    { ID id-UARFCNforNt
                                                                                                CRITICALITY ignore
                                                                                                                       EXTENSION UARFON
                                                        PRESENCE optional }
    -- This is the UARFCN for the first Frequency repetition. Mandatory for 1.28Mcps TDD when using multiple frequencies.
    { ID id-multipleFreq-dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                                                CRITICALITY reject
                                                                                                                       EXTENSION MultipleFreq-DL-HS-
PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                    PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies, This Information is for the 2nd and beyond Frequency repetition
DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRgst::= SEOUENCE
    timeSlot
                                           TimeSlot,
    midambleShiftAndBurstType
                                           MidambleShiftAndBurstType,
                                            DL-HS-PDSCH-Codelist-PSCH-ReconfRqst,
    dl-HS-PDSCH-Codelist-PSCH-ReconfRgst
    maxHSDSCH-HSSCCH-Power
                                            MaximumTransmissionPower
                                                                                    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { | DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRgst-ExtIEs} }
    OPTIONAL,
    . . .
DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRost-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-HS-PDSCH-Codelist-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSPDSCHs)) OF TDD-ChannelisationCode
DL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-
ReconfRast
```

```
DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-ReconfRqst::= SEQUENCE {
   timeSlot
                                          TimeSlot.
   midambleShiftAndBurstType768
                                          MidambleShiftAndBurstType768.
   dl-HS-PDSCH-Codelist-768-PSCH-ReconfRgst
                                          DL-HS-PDSCH-Codelist-768-PSCH-ReconfRqst,
   maxHSDSCH-HSSCCH-Power
                                          MaximumTransmissionPower
                                                                                 OPTIONAL.
                                      ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
DL-HS-PDSCH-Timeslot-InformationItem-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-HS-PDSCH-Codelist-768-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSPDSCHs768)) OF TDD-ChannelisationCode768
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container{
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItemIE-PSCH-ReconfRqst}}
   -- Includes the 2nd through the max number of frequency repetitions.
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItemIE-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    TYPE MultipleFreq-DL-HS-PDSCH-
Timeslot-Information-LCRItem-PSCH-ReconfRqst PRESENCE optional }
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst ::= SEQUENCE
   dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst
                                                     DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
   uARFCN
                                                     UARFCN,
                                                     iE-Extensions
PSCH-ReconfRqst-ExtIEs } }
                            OPTIONAL,
   . . .
MultipleFreq-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE {
   hS-SCCH-Information-PSCH-ReconfRgst
                                      HS-SCCH-Information-PSCH-ReconfRgst
                                                                             OPTIONAL,
   hS-SCCH-Information-LCR-PSCH-ReconfRgst HS-SCCH-Information-LCR-PSCH-ReconfRgst
                                                                              OPTIONAL,
                                      ProtocolExtensionContainer { { Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                      OPTIONAL,
   . . .
Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRast-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
   { ID id-hS-SCCH-Information-768-PSCH-ReconfRgst CRITICALITY reject
                                                                   EXTENSION HS-SCCH-Information-768-PSCH-ReconfRgst
                                                                                                                      PRESENCE
optional }
   -- 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
   PRESENCE
optional },
   -- Applicable to 1.28Mcps TDD only, used when there are more than maxNrOfHSSCCHs HS-SCCHs in the message.
```

```
HS-SCCH-Information-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-PSCH-ReconfRqst
HS-SCCH-InformationItem-PSCH-ReconfRast ::= SEQUENCE {
   hs-sccH-ID
                                          HS-SCCH-ID.
   timeSlot
                                          TimeSlot.
                                          MidambleShiftAndBurstType,
   midambleShiftAndBurstType
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   hS-SCCH-MaxPower
                                          DL-Power,
   hS-STCH-Information
                                          HS-SICH-Information-PSCH-ReconfRqst,
                                          iE-Extensions
HS-SCCH-InformationItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Information-PSCH-ReconfRqst ::= SEQUENCE
   hsSICH-ID
                                          HS-SICH-ID,
   timeSlot
                                          TimeSlot,
   midambleShiftAndBurstType
                                          MidambleShiftAndBurstType,
   tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   iE-Extensions
                                          ProtocolExtensionContainer { { HS-SICH-Information-PSCH-ReconfRqst-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 ::= {
   { ID id-Extended-HS-SCCH-ID
                                                    CRITICALITY ignore
                                                                         EXTENSION Extended-HS-SCCH-ID
                                                                                                                PRESENCE optional } |
    -- used if the HS-SCCH identity has a value larger than 31
   { ID id-UARFCNforNt
                                                   CRITICALITY ignore
                                                                         EXTENSION UARFON
                                                                                                                PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
    . . .
HS-SICH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE
   hsSICH-ID
                                          HS-SICH-ID,
```

```
timeSlotLCR
                                            TimeSlotLCR.
    midambleShiftLCR
                                            MidambleShiftLCR.
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode.
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                OPTIONAL,
HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SICH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SICH-ID
                                                                                                                     PRESENCE optional },
    -- used if the HS-SICH identity has a value larger than 31
HS-SCCH-Information-768-PSCH-ReconfRgst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-768-PSCH-ReconfRgst
HS-SCCH-InformationItem-768-PSCH-ReconfRgst ::= SEQUENCE {
    hs-sccH-ID
                                            HS-SCCH-ID,
    timeSlot
                                            TimeSlot,
                                            MidambleShiftAndBurstType768,
    midambleShiftAndBurstType768
                                            TDD-ChannelisationCode768,
    tdd-ChannelisationCode768
    hS-SCCH-MaxPower
                                            DI-Power.
   hS-SICH-Information-768
                                            HS-SICH-Information-768-PSCH-ReconfRqst,
                                            ProtocolExtensionContainer { { HS-SCCH-InformationItem-768-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                      OPTIONAL,
    . . .
HS-SCCH-InformationItem-768-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Information-768-PSCH-ReconfRqst ::= SEQUENCE
   hsSICH-ID
                                            HS-SICH-ID,
    timeSlot
                                            TimeSlot,
                                            MidambleShiftAndBurstType768,
   midambleShiftAndBurstType768
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
   iE-Extensions
                                            ProtocolExtensionContainer { { HS-SICH-Information-768-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                OPTIONAL,
HS-SICH-Information-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-InformationExt-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfHSSCCHsinExt)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE {
    hS-SCCH-InformationModify-PSCH-ReconfRqst
                                                    HS-SCCH-InformationModify-PSCH-ReconfRgst
                                                                                                                     OPTIONAL,
   hs-scch-InformationModify-Lcr-Psch-Reconfrqst Hs-scch-InformationModify-Lcr-Psch-Reconfrqst
                                                                                                                     OPTIONAL,
                                                    ProtocolExtensionContainer { { Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
    OPTIONAL,
Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-hS-SCCH-InformationModify-768-PSCH-ReconfRqst
                                                                CRITICALITY reject EXTENSION HS-SCCH-InformationModify-768-PSCH-ReconfRqst
    PRESENCE optional } |
    -- 7.68 Mcps TDD. Not Applicable to 3.84Mcps TDD or 1.28 Mcps TDD.
    { ID id-HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRqst
                                                                CRITICALITY ignore EXTENSION HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRgst
    PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxNrOfHSSCCHs HS-SCCHs in the message.
HS-SCCH-InformationModifyItem-PSCH-ReconfRqst
                                                 ::= SEOUENCE {
    hs-sccH-ID
                                            HS-SCCH-ID,
    timeSlot
                                            TimeSlot
                                                                                         OPTIONAL,
                                            MidambleShiftAndBurstType
    midambleShiftAndBurstType
                                                                                         OPTIONAL.
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                                         OPTIONAL.
    hS-SCCH-MaxPower
                                            DL-Power
                                                                                        OPTIONAL,
    hs-sicH-Information
                                            HS-SICH-InformationModify-PSCH-ReconfRgst OPTIONAL,
                                            ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SICH-InformationModify-PSCH-ReconfRqst
                                             ::= SEQUENCE
    hsSICH-ID
                                            HS-SICH-ID,
    timeSlot
                                                                        OPTIONAL,
                                            TimeSlot
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                        OPTIONAL,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-InformationModify-LCR-PSCH-ReconfRgst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRgst
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRgst
                                                     ::= SEQUENCE {
    hs-sccH-ID
                                            HS-SCCH-ID,
    timeSlotLCR
                                            TimeSlotLCR
                                                                                            OPTIONAL,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                                            OPTIONAL,
                                            TDD-ChannelisationCode
    first-TDD-ChannelisationCode
                                                                                            OPTIONAL,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                                            OPTIONAL.
    hS-SCCH-MaxPower
                                            DL-Power
                                                                                            OPTIONAL,
    hS-SICH-Information-LCR
                                            HS-SICH-InformationModify-LCR-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    . . .
HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SCCH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SCCH-ID
                                                                                                                     PRESENCE optional }
```

```
-- used if the HS-SCCH identity has a value larger than 31
   { ID id-UARFCNforNt.
                                                   CRITICALITY ignore EXTENSION UARFON
                                                                                                          PRESENCE optional },
   -- Applicable to 1.28Mcps TDD when using multiple frequencies
HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfHSSCCHsinExt)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst
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} }
                                                                                                                          OPTIONAL.
HS-SICH-InformationModify-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-HS-SICH-ID
                                                   CRITICALITY ignore EXTENSION Extended-HS-SICH-ID
                                                                                                          PRESENCE optional },
   -- used if the HS-SICH identity has a value larger than 31
HS-SCCH-InformationModify-768-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-768-PSCH-ReconfRqst
HS-SCCH-InformationModifyItem-768-PSCH-ReconfRqst
                                                ::= SEQUENCE {
   hs-sccH-ID
                                        HS-SCCH-ID,
   timeSlot
                                        TimeSlot
                                                                                    OPTIONAL,
                                        MidambleShiftAndBurstType768
   midambleShiftAndBurstType768
                                        TDD-ChannelisationCode768,
   tdd-ChannelisationCode768
   hS-SCCH-MaxPower
                                        DL-Power
                                                                                                                             OPTIONAL,
   hS-SICH-Information-768
                                        HS-SICH-InformationModify-768-PSCH-ReconfRgst OPTIONAL,
   iE-Extensions
                                        OPTIONAL,
   . . .
HS-SCCH-InformationModifyItem-768-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
HS-SICH-InformationModify-768-PSCH-ReconfRqst
                                            ::= SEQUENCE {
   hsSICH-ID
                                        HS-SICH-ID,
   timeSlot
                                        TimeSlot
                                                                                    OPTIONAL,
   midambleShiftAndBurstTvpe768
                                        MidambleShiftAndBurstTvpe768,
   tdd-ChannelisationCode768
                                        TDD-ChannelisationCode768.
   iE-Extensions
                                        HS-SICH-InformationModify-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

```
HS-SCCH-InformationModify-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-PSCH-ReconfRqst
Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfHSSCCHs)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRgst
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRgst
                                                       ::= SEQUENCE {
    hs-sccH-ID
                                HS-SCCH-ID,
                                ProtocolExtensionContainer { { Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                   OPTIONAL,
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-HS-SCCH-ID
                                                        CRITICALITY ignore EXTENSION Extended-HS-SCCH-ID
                                                                                                                    PRESENCE optional },
    -- used if the HS-SCCH identity has a value larger than 31
E-PUCH-Information-PSCH-ReconfRgst ::= SEQUENCE {
    1TGI-Presence
                                            LTGI-Presence,
    sNPL-Reporting-Type
                                            SNPL-Reporting-Type,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    e-PUCH-Timeslot-Info
                                            E-PUCH-Timeslot-Info,
                                            ProtocolExtensionContainer { { E-PUCH-Information-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                             OPTIONAL,
E-PUCH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Timeslot-Info ::= SEQUENCE (SIZE (1..maxNrOfE-PUCHSlots)) OF TimeSlot
Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE {
    e-AGCH-Information-PSCH-ReconfRqst
                                            E-AGCH-Information-PSCH-ReconfRqst
                                                                                    OPTIONAL,
                                            ProtocolExtensionContainer { Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                      OPTIONAL,
    . . .
Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Information-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationItem-PSCH-ReconfRqst
E-AGCH-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    e-AGCH-ID
                                            E-AGCH-Id.
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    e-AGCH-MaxPower
                                            DL-Power,
                                            ProtocolExtensionContainer { { E-AGCH-InformationItem-PSCH-ReconfRgst-ExtIEs} }
    iE-Extensions
                                                                                                                                OPTIONAL,
E-AGCH-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Modify-E-AGCH-Resource-Pool-PSCH-ReconfRqst::= SEQUENCE
    e-AGCH-InformationModify-PSCH-ReconfRqst
                                                    E-AGCH-InformationModify-PSCH-ReconfRgst
                                                    ProtocolExtensionContainer { { Modify-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Modify-E-AGCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-InformationModify-PSCH-ReconfRgst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationModifyItem-PSCH-ReconfRgst
E-AGCH-InformationModifyItem-PSCH-ReconfRqst
                                               ::= SEQUENCE {
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlot
                                            TimeSlot
                                                                        OPTIONAL,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                        OPTIONAL,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                        OPTIONAL,
    e-AGCH-MaxPower
                                            DL-Power
                                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { E-AGCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                     OPTIONAL,
    . . .
E-AGCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF Delete-From-E-AGCH-Resource-PoolItem-PSCH-ReconfRqst
Delete-From-E-AGCH-Resource-PoolItem-PSCH-ReconfRqst
                                                         ::= SEOUENCE {
    e-AGCH-ID
                                        ProtocolExtensionContainer { { Delete-From-E-AGCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                        OPTIONAL,
Delete-From-E-AGCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-Information-PSCH-ReconfRqst ::= SEQUENCE {
   midambleShiftAndBurstType
                                           MidambleShiftAndBurstType,
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode,
    e-HICH-MaxPower
                                            DL-Power,
   iE-Extensions
                                            ProtocolExtensionContainer { { E-HICH-Information-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                            OPTIONAL,
E-HICH-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Information-768-PSCH-ReconfRqst ::= SEQUENCE {
```

```
lTGI-Presence
                                            LTGI-Presence,
    sNPL-Reporting-Type
                                            SNPL-Reporting-Type,
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768,
    e-PUCH-Timeslot-Info
                                            E-PUCH-Timeslot-Info,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-PUCH-Information-768-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                OPTIONAL.
E-PUCH-Information-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst::= SEQUENCE {
    e-AGCH-Information-768-PSCH-ReconfRqst
                                                E-AGCH-Information-768-PSCH-ReconfRqst
                                                                                            OPTIONAL.
   iE-Extensions
                                            ProtocolExtensionContainer { { Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                         OPTIONAL,
Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Information-768-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationItem-768-PSCH-ReconfRqst
E-AGCH-InformationItem-768-PSCH-ReconfRqst
                                           ::= SEQUENCE
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768,
                                            TDD-ChannelisationCode768,
    tdd-ChannelisationCode768
    e-AGCH-MaxPower
                                            DL-Power,
                                            ProtocolExtensionContainer { { E-AGCH-InformationItem-768-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
E-AGCH-InformationItem-768-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst::= SEQUENCE
    e-AGCH-InformationModify-768-PSCH-ReconfRgst
                                                        E-AGCH-InformationModify-768-PSCH-ReconfRqst
                                                    ProtocolExtensionContainer { { Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-InformationModify-768-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationModifyItem-768-PSCH-ReconfRqst
E-AGCH-InformationModifyItem-768-PSCH-ReconfRqst
                                                     ::= SEQUENCE {
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlot
                                            TimeSlot
                                                                            OPTIONAL,
```

. . .

```
midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768
                                                                             OPTIONAL,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768
                                                                             OPTIONAL.
    e-AGCH-MaxPower
                                            DL-Power
                                                                             OPTIONAL.
    iE-Extensions
                                            ProtocolExtensionContainer { { E-AGCH-InformationModifyItem-768-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                         OPTIONAL.
E-AGCH-InformationModifyItem-768-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-Information-768-PSCH-ReconfRqst ::= SEQUENCE
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768.
    e-HICH-MaxPower
                                            DL-Power.
   iE-Extensions
                                            ProtocolExtensionContainer { { E-HICH-Information-768-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                 OPTIONAL,
E-HICH-Information-768-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Information-LCR-PSCH-ReconfRgst ::= SEQUENCE {
   lTGI-Presence
                                            LTGI-Presence.
    sNPL-Reporting-Type
                                            SNPL-Reporting-Type,
    e-PUCH-Timeslot-InfoLCR
                                            E-PUCH-Timeslot-InfoLCR
                                                                         OPTIONAL.
    -- This E-PUCH Timeslot Information is for the first Frequency repetition, E-PUCH timeslot information for Frequency repetitions 2 and on,
should be defined in MultipleFreg-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRgst.
                                            ProtocolExtensionContainer { { E-PUCH-Information-LCR-PSCH-ReconfRgst-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
E-PUCH-Information-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                                                                                 CRITICALITY ignore
    EXTENSION UARFON
                                                                                 PRESENCE optional } |
    -- This is the UARFCN for the first Frequency repetition. Mandatory for 1.28Mcps TDD when using multiple frequencies.
    { ID id-MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst
                                                                                 CRITICALITY reject
    EXTENSION MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRqst PRESENCE optional },
    -- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-PUCH Information is for the 2nd and beyond frequencies.
    . . .
E-PUCH-Timeslot-InfoLCR ::= SEQUENCE (SIZE (1..maxNrOfE-PUCHSlotsLCR)) OF E-PUCH-Timeslot-Item-InfoLCR
E-PUCH-Timeslot-Item-InfoLCR ::= SEOUENCE {
    timeSlot
                                            TimeSlotLCR.
    midambleShiftAndBurstTvpe
                                            MidambleShiftLCR,
    e-PUCH-Codelist-LCR
                                            E-PUCH-Codelist-LCR,
                                            ProtocolExtensionContainer { { E-PUCH-Timeslot-Item-InfoLCR-ExtIEs} }
   iE-Extensions
                                                                                                                        OPTIONAL.
    . . .
E-PUCH-Timeslot-Item-InfoLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
E-PUCH-Codelist-LCR ::= SEQUENCE (SIZE (1..maxNrOfEPUCHcodes)) OF TDD-ChannelisationCode
Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRgst ::= SEQUENCE {
    e-AGCH-Information-LCR-PSCH-ReconfRgst E-AGCH-Information-LCR-PSCH-ReconfRgst,
                                            ProtocolExtensionContainer { { Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Information-LCR-PSCH-ReconfRgst::= SEOUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationItem-LCR-PSCH-ReconfRgst
E-AGCH-InformationItem-LCR-PSCH-ReconfRgst
                                            ::= SEQUENCE
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    first-TDD-ChannelisationCode
                                            TDD-ChannelisationCode.
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode,
    e-AGCH-MaxPower
                                            DL-Power,
                                            ProtocolExtensionContainer { { E-AGCH-InformationItem-LCR-PSCH-ReconfRgst-ExtIEs} }
    iE-Extensions
E-AGCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt
                                            CRITICALITY ignore
                                                                    EXTENSION UARFON
                                                                                            PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
    . . .
Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst::= SEQUENCE {
    e-AGCH-InformationModify-LCR-PSCH-ReconfRqst E-AGCH-InformationModify-LCR-PSCH-ReconfRqst,
   iE-Extensions
                                                    ProtocolExtensionContainer { { Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-InformationModify-LCR-PSCH-ReconfRqst::= SEQUENCE (SIZE (1..maxNrOfEAGCHs)) OF E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst
E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst
                                                     ::= SEOUENCE {
    e-AGCH-ID
                                            E-AGCH-Id,
    timeSlotLCR
                                            TimeSlotLCR
                                                                    OPTIONAL,
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                    OPTIONAL,
    first-TDD-ChannelisationCode
                                            TDD-ChannelisationCode OPTIONAL,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode OPTIONAL,
    e-AGCH-MaxPower
                                            DL-Power
                                                                    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} }
```

```
E-AGCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UARFCNforNt.
                                         CRITICALITY ignore
                                                                EXTENSION UARFON
                                                                                       PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   e-HICH-Information-LCR-PSCH-ReconfRqst E-HICH-Information-LCR-PSCH-ReconfRqst,
                                         ProtocolExtensionContainer { { Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
   . . .
Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-Information-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfEHICHs)) OF E-HICH-InformationItem-LCR-PSCH-ReconfRgst
E-HICH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   e-HICH-ID-TDD
                                         E-HICH-ID-TDD,
   e-HICH-Type
                                         E-HICH-Type,
   tdd-ChannelisationCode
                                         TDD-ChannelisationCode,
   timeSlotLCR
                                         TimeSlotLCR.
   midambleShiftLCR
                                         MidambleShiftLCR,
   e-HICH-MaxPower
                                         DL-Power,
                                         ProtocolExtensionContainer { { E-HICH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
                                                                                                                           OPTIONAL,
E-HICH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
                                        CRITICALITY ignore
   { ID id-UARFCNforNt
                                                                EXTENSION UARFON
                                                                                           PRESENCE optional }.
   -- Mandatory for 1.28Mcps TDD when using multiple frequencies
    . . .
Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   e-HICH-InformationModify-LCR-PSCH-ReconfRgst E-HICH-InformationModify-LCR-PSCH-ReconfRgst,
   iE-Extensions
                                                 ProtocolExtensionContainer { { Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs} }
   OPTIONAL,
    . . .
Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfEHICHs)) OF E-HICH-InformationModifyItem-LCR-PSCH-ReconfRqst
E-HICH-InformationModifyItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
```

```
e-HICH-ID-TDD
                                            E-HICH-ID-TDD,
    e-HICH-Type
                                            E-HICH-Type
                                                                    OPTIONAL.
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode OPTIONAL.
    timeSlotLCR
                                            TimeSlotLCR
                                                                    OPTIONAL.
    midambleShiftLCR
                                            MidambleShiftLCR
                                                                    OPTIONAL.
    e-HICH-MaxPower
                                            DL-Power
                                                                    OPTIONAL,
                                            ProtocolExtensionContainer { { E-HICH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL,
E-HICH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                            CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD PRESENCE optional }
    { ID id-Extended-E-HICH-ID-TDD
    --Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
    { ID id-UARFCNforNt
                                            CRITICALITY ignore
                                                                    EXTENSION UARFON
                                                                                                PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD when using multiple frequencies
Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1.. maxNrOfEHICHs)) OF Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRgst
Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRqst
                                                       ::= SEQUENCE {
    e-HICH-ID-TDD
                                                    E-HICH-ID-TDD,
                                                    ProtocolExtensionContainer { { Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
       OPTIONAL,
Delete-From-E-HICH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                           CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD PRESENCE optional },
    { ID id-Extended-E-HICH-ID-TDD
    -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
SYNC-UL-Partition-LCR ::= SEQUENCE {
    eRUCCH-SYNC-UL-codes-bitmap
                                                BIT STRING (SIZE (8)),
                                                ProtocolExtensionContainer { { SYNC-UL-Partition-LCR-ExtIEs} }
   iE-Extensions
                                                                                                                       OPTIONAL,
SYNC-UL-Partition-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfHSSCCHsinExt)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-
ReconfRast
MultipleFreg-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container
{{ MultipleFreq-E-PUCH-Timeslot-InformationItemIE-LCR-PSCH-ReconfRqst}}
--Includes the 2nd through the max number of frequencies information repetitions.
MultipleFreq-E-PUCH-Timeslot-InformationItemIE-LCR-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    { ID id-MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst CRITICALITY ignore
                                                                                                                    TYPE MultipleFreq-E-PUCH-
Timeslot-Information-LCRItem-PSCH-ReconfRqst
                                                    PRESENCE optional }
```

```
MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRgst ::= SEQUENCE {
   e-PUCH-Timeslot-InfoLCR
                                       E-PUCH-Timeslot-InfoLCR
   uARFCN
                                                      UARFCN.
   iE-Extensions
                                                      ReconfRqst-ExtIEs} }
                         OPTIONAL,
MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE
__ *********************
PhysicalSharedChannelReconfigurationResponse ::= SEQUENCE
   protocolIEs
                     ProtocolIE-Container
                                               {{PhysicalSharedChannelReconfigurationResponse-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponse-Extensions}}
                                                                                                                    OPTIONAL,
PhysicalSharedChannelReconfigurationResponse-IES NBAP-PROTOCOL-IES ::= {
          id-CriticalityDiagnostics
                                       CRITICALITY
                                                                 TYPE
                                                                            CriticalityDiagnostics
                                                                                                           PRESENCE optional },
   { ID
                                                      ignore
   . . .
PhysicalSharedChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-HICH-TimeOffset
                                                      CRITICALITY reject EXTENSION E-HICH-TimeOffset
   PRESENCE optional }
   { ID id-E-HICH-TimeOffsetLCR
                                                      CRITICALITY reject EXTENSION E-HICH-TimeOffsetLCR
   PRESENCE optional } |
   { ID id-HSDSCH-Common-System-Information-ResponseFDD
                                                      CRITICALITY ignore EXTENSION HSDSCH-Common-System-Information-ResponseFDD
   PRESENCE optional }
   { ID id-HSDSCH-Paging-System-Information-ResponseFDD
                                                      CRITICALITY ignore EXTENSION HSDSCH-Paging-System-Information-ResponseFDD
   PRESENCE optional }
   { ID id-UARFCNforNt
                                                      CRITICALITY reject EXTENSION UARFON
   PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD when using multiple frequencies. This is the UARFCN for the first Frequency repetition.
   { ID id-E-HICH-TimeOffset-Extension
                                                      CRITICALITY reject EXTENSION E-HICH-TimeOffset-ExtensionLCR
   PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD when using multiple frequencies. This E-HICH-TimeOffset-ExtensionLCR is the E-HICH Time Offset LCR for the 2nd
and beyond frequencies.
   PRESENCE
optional }|
   -- FDD only
   { ID id-HSDSCH-Common-System-Information-ResponseLCR
                                                      CRITICALITY ignore EXTENSION HSDSCH-Common-System-Information-ResponseLCR
   PRESENCE optional } |
   { ID id-HSDSCH-Paging-System-Information-ResponseLCR
                                                      CRITICALITY ignore EXTENSION HSDSCH-Paging-System-Information-ResponseLCR
   PRESENCE optional } |
```

```
PRESENCE
optional },
   . . .
E-HICH-TimeOffset-ExtensionLCR ::= SEOUENCE (SIZE (1..maxFrequencyinCell-1)) OF ProtocolIE-Single-Container{{ Multiple-E-HICH-TimeOffsetLCR }}
Multiple-E-HICH-TimeOffsetLCR NBAP-PROTOCOL-IES ::= {
   MultipleFreq-E-HICH-TimeOffsetLCR ::= SEQUENCE {
   e-HICH-TimeOffsetLCR
                                    E-HICH-TimeOffsetLCR,
   uARFCN
                                    UARFCN.
   iE-Extensions
                                    ProtocolExtensionContainer { { MultipleFreq-E-HICH-TimeOffsetLCR-ExtIEs} }
                                                                                                    OPTIONAL.
MultipleFreq-E-HICH-TimeOffsetLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   -- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE
__ ********************
PhysicalSharedChannelReconfigurationFailure ::= SEQUENCE {
                   ProtocolIE-Container
   protocolIEs
                                           {{PhysicalSharedChannelReconfigurationFailure-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailure-Extensions}}
                                                                                                          OPTIONAL
PhysicalSharedChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    ID id-CauseLevel-PSCH-ReconfFailure
                                       CRITICALITY ignore TYPE CauseLevel-PSCH-ReconfFailure
                                                                                                PRESENCE mandatory } |
   { ID id-CriticalityDiagnostics
                                       CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                PRESENCE optional }.
   . . .
PhysicalSharedChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-PSCH-ReconfFailure ::= CHOICE {
   generalCause
                                       GeneralCauseList-PSCH-ReconfFailure,
   setSpecificCause
                                       SetSpecificCauseList-PSCH-ReconfFailureTDD,
   extension-CauseLevel-PSCH-ReconfFailure
                                       Extension-CauseLevel-PSCH-ReconfFailure
GeneralCauseList-PSCH-ReconfFailure ::= SEQUENCE {
   cause
   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-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory }
Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pDSCHSet-ID
                           PDSCHSet-ID,
    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,
    iE-Extensions
                           ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }
    . . .
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Extension-CauseLevel-PSCH-ReconfFailure ::= ProtocolIE-Single-Container {{ Extension-CauseLevel-PSCH-ReconfFailureIE }}
Extension-CauseLevel-PSCH-ReconfFailureIE NBAP-PROTOCOL-IES ::= {
    { ID id-UARFCNSpecificCauseList CRITICALITY ignore TYPE UARFCNSpecificCauseList-PSCH-ReconfFailureTDD PRESENCE mandatory }
UARFCNSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ Unsuccessful-
UARFCNItemIE-PSCH-ReconfFailureTDD }}
Unsuccessful-UARFCNItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
   mandatory }
Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
                         UARFCN,
   -- Used for 1.28 Mcps TDD to indicate the carrier on which HSDPA or HSUPA resources configuration failure occurs.
   cause
   iE-Extensions
                         ProtocolExtensionContainer { {Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD-ExtIEs} }
                                                                                                             OPTIONAL,
Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
         id-HS-Cause CRITICALITY ignore
                                            EXTENSION Cause
                                                                             optional } |
                                                                  PRESENCE
   -- Used to indicate the cause of HSDPA related configuration failure.
   { ID id-E-Cause CRITICALITY ignore
                                            EXTENSION Cause
                                                                  PRESENCE
                                                                             optional },
   -- Used to indicate the cause of E-DCH related configuration failure.
-- RESET REOUEST
ResetRequest ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{ResetRequest-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{ResetRequest-Extensions}}
                                                                                 OPTIONAL,
ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
    {ID id-ResetIndicator
                             CRITICALITY ignore
                                                   TYPE
                                                           ResetIndicator
                                                                              PRESENCE
                                                                                        mandatory},
```

```
ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
ResetIndicator ::= CHOICE {
   communicationContext
                                  CommunicationContextList-Reset,
   communicationControlPort
                                  CommunicationControlPortList-Reset,
   nodeB
                                  NULL,
CommunicationContextList-Reset ::= SEOUENCE {
    communicationContextInfoList-Reset
                                         CommunicationContextInfoList-Reset,
   iE-Extensions
                                         ProtocolExtensionContainer { {CommunicationContextItem-Reset-ExtIEs} }
    . . .
CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCommunicationContext))
                                                                                   OF ProtocolIE-Single-Container {{
CommunicationContextInfoItemIE-Reset }}
CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationContextInfoItem-Reset
                                                 CRITICALITY reject
                                                                       TYPE CommunicationContextInfoItem-Reset
                                                                                                                PRESENCE mandatory }
CommunicationContextInfoItem-Reset ::= SEQUENCE {
    communicationContextType-Reset
                                         CommunicationContextType-Reset,
   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
                                                {{ResetResponse-Extensions}}
   protocolExtensions
                        ProtocolExtensionContainer
                                                                                    OPTIONAL,
ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
```

```
PRESENCE optional },
    {ID id-CriticalityDiagnostics
                                                                        CriticalityDiagnostics
                                      CRITICALITY
                                                     ignore
ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- INFORMATION EXCHANGE INITIATION REQUEST
__ **********************
InformationExchangeInitiationRequest ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{InformationExchangeInitiationRequest-IEs}},
                          ProtocolExtensionContainer
                                                     {{InformationExchangeInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
InformationExchangeInitiationRequest-IES NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID
                                                     CRITICALITY reject
                                                                            TYPE InformationExchangeID
                                                                                                                         PRESENCE mandatory
     ID id-InformationExchangeObjectType-InfEx-Rqst
                                                     CRITICALITY reject
                                                                            TYPE InformationExchangeObjectType-InfEx-Rqst PRESENCE mandatory
    { ID id-InformationType
                                                     CRITICALITY reject
                                                                            TYPE InformationType
                                                                                                                         PRESENCE mandatory
    { ID id-InformationReportCharacteristics
                                                     CRITICALITY reject
                                                                            TYPE InformationReportCharacteristics
                                                                                                                         PRESENCE mandatory
InformationExchangeInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
    cell
                                  Cell-InfEx-Rgst,
    . . .
Cell-InfEx-Rqst ::= SEQUENCE {
   c-ID
                                  C-ID,
                                  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}},
                                                     {{InformationExchangeInitiationResponse-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                OPTIONAL,
InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID
                                                CRITICALITY ignore TYPE InformationExchangeID
                                                                                                                 PRESENCE mandatory } |
     ID id-InformationExchangeObjectType-InfEx-Rsp CRITICALITY ignore TYPE InformationExchangeObjectType-InfEx-Rsp
                                                                                                                PRESENCE optional }
     ID id-CriticalityDiagnostics
                                                 CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                 PRESENCE optional },
InformationExchangeInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
   cell
                              Cell-InfEx-Rsp,
    . . .
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 {
                          ProtocolIE-Container
                                                     {{InformationExchangeInitiationFailure-IEs}},
   protocolIEs
                                                     {{InformationExchangeInitiationFailure-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                OPTIONAL,
    . . .
InformationExchangeInitiationFailure-IES NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID
                                      CRITICALITY ignore
                                                                TYPE InformationExchangeID
                                                                                                              PRESENCE mandatory
     ID id-Cause
                                      CRITICALITY ignore
                                                                TYPE Cause
                                                                                                              PRESENCE mandatory
     ID id-CriticalityDiagnostics
                                      CRITICALITY ignore
                                                                TYPE CriticalityDiagnostics
                                                                                                              PRESENCE optional },
```

```
InformationExchangeInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- INFORMATION REPORT
      ******************
InformationReport ::= SEQUENCE {
                                              {{InformationReport-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{InformationReport-Extensions}}
   protocolExtensions
                                                                                     OPTIONAL,
InformationReport-IEs NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID
                                                 CRITICALITY ignore TYPE InformationExchangeID
                                                                                                              PRESENCE mandatory } |
   { ID id-InformationExchangeObjectType-InfEx-Rprt
                                                 CRITICALITY ignore TYPE InformationExchangeObjectType-InfEx-Rprt PRESENCE mandatory },
   . . .
InformationReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
   cell
                               Cell-Inf-Rprt,
   . . .
Cell-Inf-Rprt ::= SEQUENCE {
   requestedDataValueInformation
                               RequestedDataValueInformation,
                               ProtocolExtensionContainer {{ CellItem-Inf-Rprt-ExtIEs }}
   iE-Extensions
                                                                                                      OPTIONAL,
   . . .
Cellitem-Inf-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    INFORMATION EXCHANGE TERMINATION REOUEST
    ******************
InformationExchangeTerminationRequest ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                  {{InformationExchangeTerminationRequest-IEs}},
                                                 {{InformationExchangeTerminationRequest-Extensions}}
   protocolExtensions
                        ProtocolExtensionContainer
                                                                                                        OPTIONAL,
```

```
InformationExchangeTerminationRequest-IEs NBAP-PROTOCOL-IES ::=
          id-InformationExchangeID
                                           CRITICALITY
                                                                            TYPE
                                                                                   InformationExchangeID
                                                                                                              PRESENCE mandatory },
                                                          ignore
   . . .
InformationExchangeTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ****************
  INFORMATION EXCHANGE FAILURE INDICATION
       InformationExchangeFailureIndication ::= SEQUENCE {
                                                       {InformationExchangeFailureIndication-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                             ProtocolExtensionContainer
                                                      {{InformationExchangeFailureIndication-Extensions}}
                                                                                                                 OPTIONAL,
   . . .
InformationExchangeFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
     ID id-InformationExchangeID CRITICALITY ignore
                                                          TYPE InformationExchangeID
                                                                                       PRESENCE mandatory } |
     ID id-Cause
                                CRITICALITY ignore
                                                          TYPE Cause
                                                                                       PRESENCE mandatory },
InformationExchangeFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ****************
  CELL SYNCHRONISATION INITIATION REQUEST TDD
  *****************
CellSynchronisationInitiationRequestTDD ::= SEQUENCE {
                                                   {{CellSynchronisationInitiationRequestTDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                         ProtocolExtensionContainer
                                                  {{CellSynchronisationInitiationRequestTDD-Extensions}}
                                                                                                        OPTIONAL,
CellSynchronisationInitiationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-C-ID
                                       CRITICALITY
                                                      reiect
                                                                 TYPE
                                                                                                                 PRESENCE mandatory
     ID
        id-cellSyncBurstRepetitionPeriod
                                                  CRITICALITY
                                                                 reject
                                                                            TYPE
                                                                                   CellSyncBurstRepetitionPeriod PRESENCE mandatory
     ID id-timeslotInfo-CellSyncInitiationRqstTDD CRITICALITY
                                                                 reject
                                                                                   TimeslotInfo-CellSyncInitiationRqstTDD
   optional } -- Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.
          id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD
                                                             CRITICALITY
                                                                                       TYPE
                                                                                                         CellSyncBurstTransInit-
                                                                            reject
CellSyncInitiationRgstTDD
                                                  } -- Applicable to 3.84Mcps TDD only
                             PRESENCE
                                       optional
         id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD
   { ID
                                                                 CRITICALITY
                                                                                                         TYPE CellSyncBurstMeasureInit-
CellSyncInitiationRqstTDD
                             PRESENCE
                                       optional
                                                 }, -- Applicable to 3.84Mcps TDD only
```

```
CellSynchronisationInitiationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD
                                                                 CRITICALITY reject EXTENSION SYNCDlCodeId-TransInitLCR-
CellSyncInitiationRqstTDD PRESENCE optional } |
                                                 -- Applicable to 1.28Mcps TDD only
    { ID id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRgstTDD CRITICALITY reject EXTENSION SYNCDlCodeId-MeasureInitLCR-
CellSyncInitiationRgstTDD PRESENCE optional },
                                                  -- Applicable to 1.28Mcps TDD only
TimeslotInfo-CellSyncInitiationRqstTDD::= SEQUENCE (SIZE (1..15)) OF TimeSlot
CellSyncBurstTransInit-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBTransmissionID
                                          CSBTransmissionID,
    sfn
                                          SFN.
    cellSyncBurstCode
                                          CellSyncBurstCode,
    cellSyncBurstCodeShift
                                          CellSyncBurstCodeShift,
    initialDLTransPower
                                          DL-Power,
                                          ProtocolExtensionContainer { { CellSyncBurstTransInit-CellSyncInitiationRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD::= SEQUENCE
                                          CSBMeasurementID,
    cSBMeasurementID
    cellSyncBurstCode
                                          CellSyncBurstCode,
    cellSyncBurstCodeShift
                                          CellSyncBurstCodeShift,
    synchronisationReportType
                                          SynchronisationReportType,
                                                                                 OPTIONAL,
    synchronisationReportCharacteristics
                                          SynchronisationReportCharacteristics,
   iE-Extensions
                                          ProtocolExtensionContainer { { CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs} }
   OPTIONAL,
    . . .
CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBTransmissionID
                                          CSBTransmissionID,
    sfn
                                          SFN,
   uARFCN
                                          UARFCN,
    sYNCDlCodeId
                                          SYNCDlCodeId.
   dwPCH-Power
                                          DwPCH-Power,
                                          iE-Extensions
   OPTIONAL,
    . . .
SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRgstTDD::= SEQUENCE {
   cSBMeasurement.ID
                                         CSBMeasurementID,
   sfn
                                                                              OPTIONAL.
   uARFCN
                                         UARFCN,
   sYNCDlCodeId
                                         SYNCDlCodeId,
   synchronisationReportType
                                         SynchronisationReportType,
   synchronisationReportCharacteristics
                                         SynchronisationReportCharacteristics,
                                         ProtocolExtensionContainer { { SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRgstTDD-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 id-CriticalityDiagnostics
                                         CRITICALITY ignore
                                                               TYPE CriticalityDiagnostics
                                                                                                               PRESENCE optional },
  -- CELL SYNCHRONISATION INITIATION FAILURE TDD
CellSynchronisationInitiationFailureTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{CellSynchronisationInitiationFailureTDD-IEs}},
                                                   {{CellSynchronisationInitiationFailureTDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                           OPTIONAL,
CellSynchronisationInitiationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CellSynchronisationInitiationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID id-Cause
                                           CRITICALITY ignore
                                                                  TYPE Cause
                                                                                                                 PRESENCE mandatory } |
     ID id-CriticalityDiagnostics
                                           CRITICALITY ignore
                                                                  TYPE CriticalityDiagnostics
                                                                                                                 PRESENCE optional },
     ***************
  CELL SYNCHRONISATION RECONFIGURATION REQUEST TDD
         *******************
CellSynchronisationReconfigurationRequestTDD ::= SEQUENCE
    protocolIEs
                           ProtocolIE-Container
                                                        {CellSynchronisationReconfigurationRequestTDD-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer
                                                       {{CellSynchronisationReconfigurationRequestTDD-Extensions}}
                                                                                                                     OPTIONAL,
CellSynchronisationReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
           id-C-TD
                                           CRITICALITY
                                                           reject
                                                                      TYPE
                                                                              C-TD
                                                                                                                          PRESENCE
                                                                                                                                     mandatory
           id-TimeSlot
                                           CRITICALITY
                                                                              TimeSlot
     TD
                                                           reject
                                                                      TYPE
                                                                                                                       PRESENCE
                                                                                                                                  mandatory
    -- Applicable to 3.84Mcps TDD only. For 1.28Mcps TDD, the CRNC should set this to 0 and the Node B shall ignore it.
           id-NCyclesPerSFNperiod
                                                                              NCyclesPerSFNperiod
                                           CRITICALITY
                                                          reject
                                                                      TYPE
                                                                                                                       PRESENCE
                                                                                                                                  mandatory
           id-NRepetitionsPerCyclePeriod CRITICALITY
                                                           reject
                                                                      TYPE
                                                                              NRepetitionsPerCyclePeriod PRESENCE
                                                                                                                   mandatory } |
           id-CellSyncBurstTransReconfInfo-CellSyncReconfRgstTDD
                                                                      CRITICALITY
                                                                                                                 TYPE
     ID
                                                                                      reject
    CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD
                                                          PRESENCE
                                                                      optional
                                                                                      -- Applicable to 3.84Mcps TDD only
           id-CellSyncBurstMeasReconfiguration-CellSyncReconfRgstTDD
                                                                                                                    TYPE CellSyncBurstMeasInfo-
                                                                          CRITICALITY
                                                                                          reject
CellSyncReconfRqstTDD
                                                 }, -- Applicable to 3.84Mcps TDD only
                           PRESENCE
                                      optional
    . . .
CellSynchronisationReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD
                                                                      CRITICALITY reject EXTENSION
                                                                                                                 NSubCvclesPerCvclePeriod
                               PRESENCE optional }
                                                      -- Applicable to 1.28Mcps TDD only
    { ID id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD
                                                                          CRITICALITY reject EXTENSION
                                                                                                                 SYNCDlCodeIdTransReconfInfoLCR-
CellSyncReconfRqstTDD
                               PRESENCE optional }
                                                      -- Applicable to 1.28Mcps TDD only
    { ID id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD
                                                                          CRITICALITY reject EXTENSION
                                                                                                                 SYNCDlCodeIdMeasInfoLCR-
CellSyncReconfRgstTDD
                           PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
    . . .
CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstTransInfoItem-
CellSyncReconfRqstTDD
CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE
    cSBTransmissionID
                                               CSBTransmissionID,
    syncFrameNumberToTransmit
                                               SyncFrameNumber,
    cellSyncBurstCode
                                               CellSyncBurstCode
                                                                          OPTIONAL,
    cellSyncBurstCodeShift
                                               {\tt CellSyncBurstCodeShift}
                                                                          OPTIONAL,
    dlTransPower
                                               DL-Power
                                                                          OPTIONAL,
    iE-Extensions
                                               ProtocolExtensionContainer { { CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
   OPTIONAL,
```

```
CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasInfo-CellSyncReconfRqstTDD ::= SEQUENCE {
    cellSyncBurstMeasInfoList-CellSyncReconfRqstTDD
                                                      CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
    synchronisationReportType
                                                      SynchronisationReportTypeIE
                                                                                             OPTIONAL,
    synchronisationReportCharacteristics
                                                      SynchronisationReportCharacteristicsIE OPTIONAL,
   iE-Extensions
                                                      ProtocolExtensionContainer { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs} }
   OPTIONAL.
    . . .
CellSyncBurstMeasInfo-CellSyncReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container {{ CellSyncBurstMeasInfoListIEs-CellSyncReconfRqstTDD }}
CellSyncBurstMeasInfoListIEs-CellSyncReconfRgstTDD NBAP-PROTOCOL-IES ::= {
    TYPE CellSyncBurstMeasInfoListIE-CellSyncReconfRqstTDD
    PRESENCE mandatory }
SynchronisationReportTypeIE ::= ProtocolIE-Single-Container {{ SynchronisationReportTypeIEs }}
SynchronisationReportTypeIEs NBAP-PROTOCOL-IES ::= {
    { ID id-SynchronisationReportType
                                                      CRITICALITY reject TYPE SynchronisationReportType
                                                                                                                                 PRESENCE
   mandatory }
SynchronisationReportCharacteristicsIE ::= ProtocolIE-Single-Container {{ SynchronisationReportCharacteristicsIEs }}
SynchronisationReportCharacteristicsIEs NBAP-PROTOCOL-IES ::= {
    { ID id-SynchronisationReportCharacteristics
                                                      CRITICALITY reject TYPE SynchronisationReportCharacteristics
                                                                                                                        PRESENCE mandatory
CellSyncBurstMeasInfoListIE-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-
CellSyncReconfRqstTDD
CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    syncFrameNrToReceive
                                          SyncFrameNumber,
   syncBurstInfo
                                          CellSyncBurstInfoList-CellSyncReconfRqstTDD,
                                          ProtocolExtensionContainer { { CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
CellSyncBurstInfoList-CellSyncReconfRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfoItem-CellSyncReconfRgstTDD
CellSyncBurstInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
   cSBMeasurementID
                                            CSBMeasurementID,
   cellSyncBurstCode
                                            CellSyncBurstCode,
                                            CellSyncBurstCodeShift,
   cellSyncBurstCodeShift
   iE-Extensions
                                            ProtocolExtensionContainer { { CellSyncBurstInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
                                                                                                                             OPTIONAL,
CellSyncBurstInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfSyncFramesLCR)) OF SYNCDlCodeIdTransReconfItemLCR-
CellSyncReconfRqstTDD
SYNCDlCodeIdTransReconfItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
   cSBTransmissionID
                                            CSBTransmissionID,
   syncFrameNumberforTransmit
                                            SyncFrameNumber,
   uARFCN
                                            UARFCN,
   sYNCDlCodeId
                                            SYNCDlCodeId
                                                          OPTIONAL.
   dwPCH-Power
                                            DwPCH-Power
                                                          OPTIONAL.
   iE-Extensions
                                            OPTIONAL,
   . . .
SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD-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-CellSyncReconfRqstTDD::= SEQUENCE (SIZE (1.. maxNrOfSyncDLCodesLCR)) OF SYNCDlCodeIdMeasInfoItem-CellSyncReconfRqstTDD
SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
   syncFrameNrToReceive
                                        SyncFrameNumber,
   sYNCDlCodeIdInfoLCR
                                        SYNCDlCodeIdInfoListLCR-CellSyncReconfRqstTDD,
   iE-Extensions
                                        ProtocolExtensionContainer { { SYNCDlCodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
                                                                                                                             OPTIONAL,
```

```
SYNCDlCodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SYNCDlCodeIdInfoListLCR-CellSyncReconfRgstTDD ::= SEQUENCE (SIZE (1.. maxNrOfReceptionsperSyncFrameLCR)) OF SYNCDlCodeIdInfoItemLCR-
CellSyncReconfRqstTDD
SYNCDlCodeIdInfoItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBMeasurementID
                                              CSBMeasurementID,
    sYNCD1CodeId
                                              SYNCDlCodeId,
   uARFCN
                                              UARFCN,
                                              TiminqAdjustmentValueLCR
   propagationDelayCompensation
   iE-Extensions
                                              ProtocolExtensionContainer { { SYNCDlCodeIdInfoItemLCR-CellSyncReconfRgstTDD-ExtIEs} }
   OPTIONAL,
SYNCDlCodeIdInfoItemLCR-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  CELL SYNCHRONISATION RECONFIGURATION RESPONSE TDD
  ******************
CellSynchronisationReconfigurationResponseTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{CellSynchronisationReconfigurationResponseTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{CellSynchronisationReconfigurationResponseTDD-Extensions}}
                                                                                                                    OPTIONAL,
   . . .
CellSynchronisationReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReconfigurationResponseTDD-IES NBAP-PROTOCOL-IES ::=
    { ID
           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}},
                        ProtocolExtensionContainer {{CellSynchronisationAdjustmentRequestTDD-Extensions}}
                                                                                                         OPTIONAL,
   protocolExtensions
CellSynchronisationAdjustmentRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-CellAdjustmentInfo-SyncAdjustmntRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfo-SyncAdjustmentRqstTDD PRESENCE mandatory },
   . . .
CellAdjustmentInfo-SyncAdjustmentRqstTDD::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellAdjustmentInfoItemIE-
SyncAdjustmntRqstTDD }}
CellAdjustmentInfoItemIE-SyncAdjustmntRqstTDD NBAP-PROTOCOL-IES ::= {
   mandatory }
CellAdjustmentInfoItem-SyncAdjustmentRqstTDD ::= SEQUENCE
                                                                 OPTIONAL,
   frameAdjustmentValue
                                        FrameAdjustmentValue
   timingAdjustmentValue
                                       TimingAdjustmentValue
                                                                 OPTIONAL,
   dLTransPower
                                       DL-Power
                                                                 OPTIONAL, -- Applicable to 3.84Mcps TDD only
   sfn
                                                                 OPTIONAL,
   iE-Extensions
                                        ProtocolExtensionContainer { { CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs} }
                                                                                                                         OPTIONAL,
   . . .
CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-DwPCH-Power
                                    CRITICALITY ignore EXTENSION DwPCH-Power
                                                                                       PRESENCE optional }
```

```
-- Applicable to 1.28Mcps TDD only
   { ID id-TimingAdjustmentValueLCR
                                     CRITICALITY ignore EXTENSION TimingAdjustmentValueLCR PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
   CELL SYNCHRONISATION ADJUSTMENT RESPONSE TDD
  *****************
CellSynchronisationAdjustmentResponseTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{CellSynchronisationAdjustmentResponseTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer
                                                   {{CellSynchronisationAdjustmentResponseTDD-Extensions}}
                                                                                                           OPTIONAL,
CellSynchronisationAdjustmentResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-CriticalityDiagnostics
                                            CRITICALITY
                                                                      TYPE
                                                                              CriticalityDiagnostics
                                                                                                                      PRESENCE optional }.
  CELL SYNCHRONISATION ADJUSTMENT FAILURE TDD
__ *******************************
CellSynchronisationAdjustmentFailureTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                    {{CellSynchronisationAdjustmentFailureTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CellSynchronisationAdjustmentFailureTDD-Extensions}}
                                                                                                          OPTIONAL,
CellSynchronisationAdjustmentFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-CauseLevel-SyncAdjustmntFailureTDD CRITICALITY ignore
                                                                      TYPE
                                                                              CauseLevel-SyncAdjustmntFailureTDD
                                                                                                                PRESENCE mandatory
     ID
          id-CriticalityDiagnostics
                                                CRITICALITY ignore
                                                                      TYPE
                                                                              CriticalityDiagnostics
                                                                                                                PRESENCE optional },
   . . .
CauseLevel-SyncAdjustmntFailureTDD ::= CHOICE {
                         GeneralCauseList-SyncAdjustmntFailureTDD,
   generalCause
   cellSpecificCause
                          CellSpecificCauseList-SyncAdjustmntFailureTDD,
```

```
GeneralCauseList-SyncAdjustmntFailureTDD::= SEQUENCE {
    cause
    iE-Extensions
                                               ProtocolExtensionContainer { GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs} }
                                                                                                                                    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
                                                       PRESENCE
                                                                   mandatory \,
Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD::= SEQUENCE {
    c-ID
                                               C-ID,
    cause
    iE-Extensions
                                               ProtocolExtensionContainer { { Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-
ExtIEs } }
               OPTIONAL,
Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- CELL SYNCHRONISATION TERMINATION REQUEST TDD
__ *********************************
CellSynchronisationTerminationRequestTDD ::= SEQUENCE {
                                                        {{CellSynchronisationTerminationRequestTDD-IEs}},
    protocolIEs
                           ProtocolIE-Container
    protocolExtensions
                           ProtocolExtensionContainer
                                                      {{CellSynchronisationTerminationRequestTDD-Extensions}}
                                                                                                                   OPTIONAL,
```

```
CellSynchronisationTerminationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationTerminationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID
           id-C-ID
                                          CRITICALITY
                                                          ignore
                                                                     TYPE
                                                                             C-ID
                                                                                                                        PRESENCE mandatory
     ID
           id-CSBTransmissionID
                                          CRITICALITY
                                                          ignore
                                                                     TYPE
                                                                             CSBTransmissionID
                                                                                                                        PRESENCE optional
     TD
           id-CSBMeasurementID
                                          CRITICALITY
                                                          ignore
                                                                     TYPE
                                                                             CSBMeasurement ID
                                                                                                                        PRESENCE optional
    . . .
  CELL SYNCHRONISATION FAILURE INDICATION TDD
  *******************
CellSynchronisationFailureIndicationTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{CellSynchronisationFailureIndicationTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer
                                                     {{CellSynchronisationFailureIndicationTDD-Extensions}}
                                                                                                               OPTIONAL,
CellSynchronisationFailureIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationFailureIndicationTDD-IES NBAP-PROTOCOL-IES ::= {
     ID
           id-C-ID
                                          CRITICALITY
                                                          ignore
                                                                     TYPE
                                                                             C-ID
                                                                                                                        PRESENCE mandatory
                                                                             CSBTransmissionID
     ID
          id-CSBTransmissionID
                                          CRITICALITY
                                                          ignore
                                                                     TYPE
                                                                                                                        PRESENCE optional
           id-CSBMeasurementID
                                                                     TYPE
                                                                                                                        PRESENCE optional
     TD
                                          CRITICALITY
                                                          ignore
                                                                             CSBMeasurement ID
     ID
           id-Cause
                                          CRITICALITY
                                                         ignore
                                                                     TYPE
                                                                                                                        PRESENCE mandatory
                                                                             Cause
-- CELL SYNCHRONISATION REPORT TDD
__ ********************
CellSynchronisationReportTDD ::= SEQUENCE {
                                                      {{CellSynchronisationReportTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
                                                     {{CellSynchronisationReportTDD-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                    OPTIONAL,
CellSynchronisationReportTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReportTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CellSyncInfo-CellSyncReprtTDD
                                              CRITICALITY ignore
                                                                     TYPE CellSyncInfo-CellSyncReprtTDD
                                                                                                                     PRESENCE mandatory },
```

```
CellSyncInfo-CellSyncReprtTDD ::= SEOUENCE (SIZE (1..maxCellinNodeB)) OF CellSyncInfoItemIE-CellSyncReprtTDD
CellSyncInfoItemIE-CellSyncReprtTDD ::= SEQUENCE {
    c-ID-CellSvncReprtTDD
                                        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
                                                                                                                                      OPTIONAL,
    . . .
IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
     ID id-AccumulatedClockupdate-CellSyncReprtTDD
                                                        CRITICALITY ignore EXTENSION TimingAdjustmentValue
                                                                                                                    PRESENCE optional } |
     ID id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD CRITICALITY ignore EXTENSION
                                                                                        SyncDLCodeIdsMeasInfoList-CellSyncReprtTDDPRESENCE 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 {
                                            SFN.
    cellSyncBurstInfo-CellSyncReprtTDD
                                            SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
                                            ProtocolExtensionContainer { { CellSyncBurstMeasInfoItem-CellSyncReprtTDD-ExtIEs} }
    iE-Extensions
    . . .
```

```
CellSyncBurstMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
    cellSyncBurstAvailable
                                CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstNotAvailable NULL,
CellSyncBurstAvailable-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstTiming
                                CellSyncBurstTiming,
    cellSyncBurstSIR
                                CellSyncBurstSIR,
    iE-Extensions
                                ProtocolExtensionContainer { { CellSyncBurstAvailable-CellSyncReprtTDD-ExtIEs} }
                                                                                                                       OPTIONAL,
CellSyncBurstAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0..maxNrOfSyncFramesLCR)) OF SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD
-- Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.
SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
                                            SFN,
    syncDLCodeIdInfo-CellSyncReprtTDD
                                            SyncDLCodeIdInfo-CellSyncReprtTDD
    iE-Extensions
                                            ProtocolExtensionContainer { { SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs } }
                                                                                                                                      OPTIONAL,
SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeIdInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptionsperSyncFrameLCR)) OF SyncDLCodeIdItem-CellSyncReprtTDD
SyncDLCodeIdItem-CellSyncReprtTDD ::= CHOICE
    syncDLCodeIdAvailable
                                        SyncDLCodeIdAvailable-CellSyncReprtTDD,
    syncDLCodeIDNotAvailable
                                        NULL,
    . . .
SyncDLCodeIdAvailable-CellSyncReprtTDD ::= SEQUENCE {
                                CellSyncBurstTimingLCR,
    syncDLCodeIdTiming
    syncDLCodeIdSIR
                                CellSyncBurstSIR,
   iE-Extensions
                                ProtocolExtensionContainer { { SyncDLCodeIdAvailable-CellSyncReprtTDD-ExtIEs } }
                                                                                                                       OPTIONAL,
SyncDLCodeIdAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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```
__ *********************
  BEARER REARRANGEMENT INDICATION
      BearerRearrangementIndication ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {BearerRearrangementIndication-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{BearerRearrangementIndication-Extensions}}
                                                                                                                     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
                                                                                                                   PRESENCE optional
                                                    CRITICALITY ignore TYPE DSCH-RearrangeList-Bearer-RearrangeInd
   -- TDD only.
   { ID id-USCH-RearrangeList-Bearer-RearrangeInd
                                                    CRITICALITY ignore TYPE USCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                   PRESENCE optional }
   -- TDD only.
   { ID id-HSDSCH-RearrangeList-Bearer-RearrangeInd
                                                    CRITICALITY ignore TYPE HSDSCH-RearrangeList-Bearer-RearrangeInd
                                                                                                                   PRESENCE optional },
   . . .
BearerRearrangementIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-E-DCH-RearrangeList-Bearer-RearrangeInd
                                                   CRITICALITY ignore EXTENSION E-DCH-RearrangeList-Bearer-RearrangeInd PRESENCE optional },
   . . .
DCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-RearrangeItem-Bearer-RearrangeInd
DCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE
   dCH-ID
                                                DCH-ID,
                                                iE-Extensions
                                                                                                                           OPTIONAL,
   . . .
DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-RearrangeList-Bearer-RearrangeInd ::= 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 ::= {
E-DCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF E-DCH-RearrangeItem-Bearer-RearrangeInd
E-DCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
   e-DCH-MACdFlow-ID
                                                E-DCH-MACdFlow-ID,
   iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }
                                                                                                                              OPTIONAL,
E-DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- RADIO LINK ACTIVATION COMMAND FDD
  RadioLinkActivationCommandFDD ::= SEQUENCE {
                                                    {{RadioLinkActivationCommandFDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
                                                   {{RadioLinkActivationCommandFDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                                OPTIONAL,
RadioLinkActivationCommandFDD-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                           CRITICALITY ignore TYPE
                                                                                     NodeB-CommunicationContextID
              mandatory } |
          id-DelayedActivationList-RL-ActivationCmdFDD
                                                           CRITICALITY ignore TYPE
                                                                                     DelayedActivationInformationList-RL-ActivationCmdFDD
       PRESENCE mandatory },
```

```
RadioLinkActivationCommandFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
   { DelayedActivationInformation-RL-ActivationCmdFDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdFDD-IEs NBAP-PROTOCOL-IES ::= {
    ID id-DelayedActivationInformation-RL-ActivationCmdFDD CRITICALITY ignore TYPE DelayedActivationInformation-RL-ActivationCmdFDD PRESENCE
optional
DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
   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}},
   protocolExtensions ProtocolExtensionContainer
                                                {{RadioLinkActivationCommandTDD-Extensions}}
                                                                                                          OPTIONAL
RadioLinkActivationCommandTDD-IES NBAP-PROTOCOL-IES ::= {
   { ID
         id-NodeB-CommunicationContextID
                                                        CRITICALITY ignore TYPE
                                                                                NodeB-CommunicationContextID
   PRESENCE
             mandatory } |
          id-DelayedActivationList-RL-ActivationCmdTDD
                                                        CRITICALITY ignore TYPE
                                                                                DelayedActivationInformationList-RL-ActivationCmdTDD
                 mandatory },
       PRESENCE
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 {
                               RL-ID,
    delayed-activation-update DelayedActivationUpdate,
                               ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK PARAMETER UPDATE INDICATION FDD
__ *********************
RadioLinkParameterUpdateIndicationFDD ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                        {{RadioLinkParameterUpdateIndicationFDD-IEs}},
                                                      {{RadioLinkParameterUpdateIndicationFDD-Extensions}}
    protocolExtensions
                           ProtocolExtensionContainer
                                                                                                                    OPTIONAL,
RadioLinkParameterUpdateIndicationFDD-IEs NBAP-PROTOCOL-IES ::=
     ID id-CRNC-CommunicationContextID
                                                                                   CRNC-CommunicationContextID
                                                                                                                        PRESENCE mandatory } |
                                                               ignore
                                                                           TYPE
                                               CRITICALITY
    { ID id-HSDSCH-FDD-Update-Information
                                               CRITICALITY
                                                               ignore
                                                                           TYPE
                                                                                  HSDSCH-FDD-Update-Information
                                                                                                                        PRESENCE optional },
    . . .
RadioLinkParameterUpdateIndicationFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-FDD-Update-Information
                                               CRITICALITY
                                                               ignore
                                                                           EXTENSION E-DCH-FDD-Update-Information
                                                                                                                          PRESENCE optional } |
     ID id-Additional-HS-Cell-Information-RL-Param-Upd CRITICALITY ignore
                                                                               EXTENSION Additional-HS-Cell-Information-RL-Param-Upd PRESENCE
optional }.
    . . .
Additional-HS-Cell-Information-RL-Param-Upd ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs
Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                       RL-ID,
    hS-DSCH-FDD-Secondary-Serving-Update-Information
                                                      HS-DSCH-FDD-Secondary-Serving-Update-Information,
                                   ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Setup-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-HS-Cell-Information-RL-Setup-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK PARAMETER UPDATE INDICATION TDD
```

```
RadioLinkParameterUpdateIndicationTDD ::= SEQUENCE
   protocolIEs
                          ProtocolIE-Container
                                                     {{RadioLinkParameterUpdateIndicationTDD-IEs}},
                                                     {{RadioLinkParameterUpdateIndicationTDD-Extensions}}
   protocolExtensions
                          ProtocolExtensionContainer
                                                                                                                OPTIONAL,
RadioLinkParameterUpdateIndicationTDD-IES NBAP-PROTOCOL-IES ::= {
     ID id-CRNC-CommunicationContextID
                                                                        TYPE
                                                                               CRNC-CommunicationContextID
                                             CRITICALITY
                                                            ignore
                                                                                                                   PRESENCE mandatory }
                                                                                                                   PRESENCE optional },
    { ID id-HSDSCH-TDD-Update-Information
                                             CRITICALITY
                                                            ignore
                                                                        TYPE
                                                                               HSDSCH-TDD-Update-Information
    . . .
RadioLinkParameterUpdateIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- MBMS NOTIFICATION UPDATE COMMAND
  *********************
MBMSNotificationUpdateCommand ::= SEQUENCE {
                          ProtocolIE-Container
                                                {{ MBMSNotificationUpdateCommand-IEs}},
   protocolIEs
                          ProtocolExtensionContainer {{ MBMSNotificationUpdateCommand-Extensions}}
   protocolExtensions
                                                                                                                OPTIONAL,
MBMSNotificationUpdateCommand-IEs NBAP-PROTOCOL-IES ::= {
                                             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 ::= {
-- UE STATUS UPDATE
__ ********************
UEStatusUpdateCommand ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                                 {{UEStatusUpdateCommand-IEs}},
   protocolExtensions ProtocolExtensionContainer {{UEStatusUpdateCommand-Extensions}}
                                                                                       OPTIONAL,
```

PRESENCE

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,
    maxHS-PDSCHCodeNrComp-1,
    maxHS-SCCHCodeNrComp-1,
    maxNrOfCellSyncBursts,
   maxNrOfCombEDPDCH,
   maxNrOfEDCH-HARQ-PO-QUANTSTEPs,
    maxNrOfEDCHHARQProcesses2msEDCH,
   maxNrOfBits-MACe-PDU-non-scheduled,
    maxNrOfEDPCCH-PO-QUANTSTEPs,
    maxNrOfRefETFCI-PO-QUANTSTEPs,
    maxNrOfRefETFCIs,
    maxNrOfMeasNCell,
   maxNrOfMeasNCell-1,
    maxNrOfReceptsPerSyncFrame,
    maxNrOfSF,
    maxTGPS,
```

```
maxNrOfUSCHs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfDPCHs,
maxNrOfDPCHLCRs,
maxNrOfDPCHs768,
maxNrOfCodes,
maxNrOfDSCHs.
maxNrOfDLTSs,
maxNrOfDLTSLCRs.
maxNrOfDCHs,
maxNrOfLevels,
maxNoGPSItems,
maxNoSat,
maxNrOfCellPortionsPerCell,
maxNrOfCellPortionsPerCell-1,
maxNrOfHSSCCHs,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfMACdPDUIndexes,
maxNrOfMACdPDUIndexes-1,
maxNrOfMACdPDUSize,
maxNrOfNIs.
maxNrOfPriorityQueues,
maxNrOfPriorityQueues-1,
maxNrOfHAROProcesses,
maxNrOfSyncDLCodesLCR,
maxNrOfSyncFramesLCR,
maxNrOfContextsOnUeList,
maxNrOfPriorityClasses,
maxNrOfSatAlmanac-maxNoSat,
maxNrOfE-AGCHs,
maxNrOfEDCHMACdFlows,
maxNrOfEDCHMACdFlows-1,
maxNrOfE-RGCHs-E-HICHs,
maxNrofSiqSeqRGHI-1,
maxNoOfLogicalChannels,
maxNrOfEAGCHs.
maxNrOfRefBetas,
maxNrOfEAGCHCodes,
maxNrOfHS-DSCH-TBSs,
maxNrOfHS-DSCH-TBSs-HS-SCCHless,
maxNrOfEHICHCodes,
maxNrOfCommonMACFlows,
maxNrOfCommonMACFlows-1,
maxNrOfPagingMACFlow,
maxNrOfPagingMACFlow-1,
maxNrOfcommonMACQueues,
maxNrOfpagingMACQueues,
maxNrOfHS-DSCHTBSsE-PCH,
maxGANSSSat,
maxNoGANSS,
maxSqnType,
```

```
maxHSDPAFrequency,
maxHSDPAFrequency-1,
maxGANSSSatAlmanac.
maxGANSSClockMod.
maxNrOfEDCHRLs.
maxCellinNodeB,
maxERNTItoRelease,
maxNrOfCommonEDCH,
maxFrequencyinCell-1,
maxNrOfCommonMACFlowsLCR,
maxNrOfCommonMACFlowsLCR-1,
maxNrOfHSSCCHsLCR,
maxNrOfEDCHMACdFlowsLCR.
maxNrOfEDCHMACdFlowsLCR-1,
maxNrOfEAGCHsLCR,
maxNrOfEHICHsLCR,
maxnrofERUCCHsLCR,
maxNrOfHSPDSCHs,
maxFrequencyinCell,
maxNrOfHSDSCH-1,
maxNrOfHSDSCH,
maxGANSS-1,
id-BroadcastCommonTransportBearerIndication.
id-MessageStructure,
id-ReportCharacteristicsType-OnModification,
id-Rx-Timing-Deviation-Value-LCR,
id-SFNSFNMeasurementValueInformation,
id-SFNSFNMeasurementThresholdInformation,
id-TUTRANGPSMeasurementValueInformation,
id-TUTRANGPSMeasurementThresholdInformation,
id-TypeOfError,
id-transportlayeraddress,
id-bindingID,
id-Angle-Of-Arrival-Value-LCR,
id-SvncDLCodeIdThreInfoLCR,
id-neighbouringTDDCellMeasurementInformationLCR,
id-HS-SICH-Reception-Quality,
id-HS-SICH-Reception-Ouality-Measurement-Value,
id-Initial-DL-Power-TimeslotLCR-InformationItem,
id-Maximum-DL-Power-TimeslotLCR-InformationItem,
id-Minimum-DL-Power-TimeslotLCR-InformationItem,
id-Received-total-wide-band-power-For-CellPortion,
id-Received-total-wide-band-power-For-CellPortion-Value,
id-Transmitted-Carrier-Power-For-CellPortion,
id-Transmitted-Carrier-Power-For-CellPortion-Value,
id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission,
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortion,
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue,
id-HS-DSCHRequiredPowerValueInformation,
id-HS-DSCHProvidedBitRateValueInformation,
id-HS-DSCHRequiredPowerValue,
id-HS-DSCHRequiredPowerValue-For-Cell-Portion,
id-HS-DSCHRequiredPowerValueInformation-For-CellPortion,
id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion,
```

```
id-HSDSCH-MACdPDUSizeFormat,
id-HS-PDSCH-Code-Change-Grant,
id-HS-PDSCH-Code-Change-Indicator.
id-Best-Cell-Portions-Value,
id-Unidirectional-DCH-Indicator,
id-SAT-Info-Almanac-ExtItem,
id-TnlOos.
id-UpPTSInterferenceValue,
id-HARO-Preamble-Mode,
id-HARO-Preamble-Mode-Activation-Indicator,
id-DLTransmissionBranchLoadValue,
id-E-DCHProvidedBitRateValueInformation,
id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue,
id-HSSICH-SIRTarget,
id-PLCCH-Information-UL-TimeslotLCR-Info,
id-neighbouringTDDCellMeasurementInformation768.
id-Rx-Timing-Deviation-Value-768,
id-hsSCCH-Specific-Information-ResponseTDD768,
id-Rx-Timing-Deviation-Value-384-ext,
id-E-DCH-PowerOffset-for-SchedulingInfo,
id-Extended-Round-Trip-Time-Value,
id-ExtendedPropagationDelay,
id-HSSICH-TPC-StepSize,
id-RTWP-CellPortion-ReportingIndicator,
id-Received-Scheduled-EDCH-Power-Share-Value,
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value,
id-Received-Scheduled-EDCH-Power-Share,
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion,
id-ueCapability-Info,
id-ContinuousPacketConnectivityHS-SCCH-less-Information,
id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response,
id-MIMO-ActivationIndicator,
id-MIMO-Mode-Indicator,
id-MIMO-N-M-Ratio,
id-Additional-failed-HS-SICH,
id-Additional-missed-HS-SICH,
id-Additional-total-HS-SICH,
id-Additional-HS-SICH-Reception-Quality-Measurement-Value,
id-LCRTDD-uplink-Physical-Channel-Capability,
id-SixteenQAM-UL-Operation-Indicator,
id-E-AGCH-Table-Choice,
id-E-TFCI-Boost-Information,
id-E-DPDCH-PowerInterpolation,
id-MaximumMACdPDU-SizeExtended,
id-GANSS-Common-Data,
id-GANSS-Information,
id-GANSS-Generic-Data,
id-TUTRANGANSSMeasurementThresholdInformation.
id-TUTRANGANSSMeasurementValueInformation,
id-Extended-RNC-ID,
id-HARQ-MemoryPartitioningInfoExtForMIMO,
id-Ext-Reference-E-TFCI-PO,
id-Ext-Max-Bits-MACe-PDU-non-scheduled,
id-TransportBearerNotSetupIndicator,
```

```
id-TransportBearerNotRequestedIndicator,
id-UARFCNforNt.
id-number-Of-Supported-Carriers,
id-multipleFreg-HSPDSCH-InformationList-ResponseTDDLCR,
id-tSN-Length,
id-multicarrier-number,
id-Extended-HS-SICH-ID.
id-Default-Serving-Grant-in-DTX-Cycle2,
id-SixtyfourQAM-UsageAllowedIndicator,
id-SixtyfourQAM-DL-UsageIndicator,
id-IPMulticastDataBearerIndication,
id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory,
id-ContinuousPacketConnectivityHS-SCCH-less-Deactivate-Indicator,
id-Extended-E-HICH-ID-TDD.
id-E-DCH-MACdPDUSizeFormat,
id-MaximumNumber-Of-Retransmission-for-Scheduling-Info-LCRTDD,
id-E-DCH-RetransmissionTimer-for-SchedulingInfo-LCRTDD,
id-E-PUCH-PowerControlGAP,
id-HSDSCH-TBSizeTableIndicator,
id-E-DCH-DL-Control-Channel-Change-Information,
id-E-DCH-DL-Control-Channel-Grant-Information,
id-DGANSS-Corrections-Req,
id-UE-without-HS-SCCH-constraint-indicator,
id-TransportBearerRequestIndicator,
id-EnhancedHSServingCC-Abort,
id-GANSS-Time-ID,
id-GANSS-AddIonoModelReg,
id-GANSS-EarthOrientParaReg,
id-GANSS-AddNavigationModelsReg,
id-GANSS-AddUTCModelsReg,
id-GANSS-AuxInfoReg,
id-GANSS-SBAS-ID,
id-GANSS-ID,
id-GANSS-Additional-Ionospheric-Model,
id-GANSS-Earth-Orientation-Parameters,
id-GANSS-Additional-Time-Models,
id-GANSS-Additional-Navigation-Models,
id-GANSS-Additional-UTC-Models,
id-GANSS-Auxiliary-Information,
id-EDCH-RACH-Report-Value,
id-EDCH-RACH-Report-IncrDecrThres,
id-EDCH-RACH-Report-ThresholdInformation
```

## FROM NBAP-Constants

Criticality, ProcedureID, ProtocolIE-ID, TransactionID,

```
TriggeringMessage
FROM NBAP-CommonDataTypes
    NBAP-PROTOCOL-IES,
    ProtocolExtensionContainer{},
    ProtocolIE-Single-Container{},
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers:
-- -----
AckNack-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
Ack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)
-- According to mapping in [22].
AdditionalMeasurementValueList::= SEQUENCE (SIZE (1..maxFrequencyinCell-1)) OF AdditionalMeasurementValue
AdditionalMeasurementValue ::= SEQUENCE {
    uARFCN
                                           UARFCN,
    timeSlotMeasurementValueListLCR
                                           TimeSlotMeasurementValueListLCR,
    iE-Extensions
                                           ProtocolExtensionContainer { {AdditionalMeasurementValueList-ExtIEs} } OPTIONAL,
AdditionalMeasurementValueList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AdditionalTimeSlotListLCR::= SEQUENCE (SIZE (0..maxFrequencyinCell-1)) OF AdditionalTimeSlotLCR
AdditionalTimeSlotLCR ::= SEQUENCE {
    uARFCN
                                       UARFCN,
    timeslot-InitiatedListLCR
                                               TimeSlot-InitiatedListLCR
                                                                            OPTIONAL,
                                               ProtocolExtensionContainer { {AdditionalTimeSlotLCR-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
AdditionalTimeSlotLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AddorDeleteIndicator ::= ENUMERATED {
    add,
    delete
```

```
Active-Pattern-Sequence-Information ::= SEQUENCE {
    cMConfigurationChangeCFN
                                                             CFN,
    transmission-Gap-Pattern-Sequence-Status
                                                Transmission-Gap-Pattern-Sequence-Status-List OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
        tGPSID
                        TGPSID,
        tGPRC
                        TGPRC,
        tGCFN
                        CFN.
                            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 {
    νO,
    v1
AllocationRetentionPriority ::= SEQUENCE {
                                PriorityLevel,
    priorityLevel
    pre-emptionCapability
                                Pre-emptionCapability,
    pre-emptionVulnerability
                                Pre-emptionVulnerability,
                                ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    iE-Extensions
AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AlternativeFormatReportingIndicator ::= ENUMERATED {
   alternativeFormatAllowed,...
```

```
Angle-Of-Arrival-Value-LCR ::= SEQUENCE {
   aOA-LCR
                             AOA-LCR,
   aOA-LCR-Accuracy-Class
                             AOA-LCR-Accuracy-Class,
   iE-Extensions
                             ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
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,q,h,...}
AvailabilityStatus ::= ENUMERATED {
   empty,
   in-test,
   failed,
   power-off,
   off-line,
   off-duty,
   dependency,
   degraded,
   not-installed,
   log-full,
-- ------
BCCH-Specific-HSDSCH-RNTI-Information::= SEQUENCE {
   bCCH-Specific-HSDSCH-RNTI
                                                 HSDSCH-RNTI,
   hSSCCH-Power
                                                 DL-Power,
   hSPDSCH-Power
                                                 DL-Power,
                                                 ProtocolExtensionContainer { { BCCH-Specific-HSDSCH-RNTI-Information-ExtIEs } }
   iE-Extensions
                                                                                                                                OPTIONAL,
BCCH-Specific-HSDSCH-RNTI-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCCH-Specific-HSDSCH-RNTI-InformationLCR::= SEQUENCE {
   bCCH-Specific-HSDSCH-RNTI
                                                 HSDSCH-RNTI,
   hSSCCH-Power
                                                 DL-Power,
   hSPDSCH-Power
                                                 DL-Power,
```

```
ProtocolExtensionContainer { { BCCH-Specific-HSDSCH-RNTI-InformationLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
BCCH-Specific-HSDSCH-RNTI-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed
Best-Cell-Portions-Value::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Best-Cell-Portions-Item
Best-Cell-Portions-Item ::= SEQUENCE {
                                CellPortionID,
    cellPortionID
    sIRValue
                                SIR-Value,
    iE-Extensions
                                ProtocolExtensionContainer { { Best-Cell-Portions-Item-ExtIEs} }
                                                                                                                     OPTIONAL,
Best-Cell-Portions-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BindingID ::= OCTET STRING (SIZE (1..4, ...))
-- If the Binding ID includes a UDP port, the UDP port is included in octet 1 and 2. The first octet of
-- the UDP port field is included in the first octet of the Binding ID.
BetaCD ::= INTEGER (0..15)
BlockingPriorityIndicator ::= ENUMERATED {
   high,
    normal,
    low,
-- High priority: Block resource immediately.
-- Normal priority: Block resource when idle or upon timer expiry.
-- Low priority: Block resource when idle.
SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
BundlingModeIndicator ::= ENUMERATED {
    bundling,
    no-bundling
```

```
BroadcastCommonTransportBearerIndication ::= SEQUENCE {
   commonTransportChannelID
                                      CommonTransportChannelID,
   cid
   iE-Extensions
                                      ProtocolExtensionContainer
                                                                   { BroadcastCommonTransportBearerIndication-ExtIEs} }
                                                                                                                         OPTIONAL,
BroadcastCommonTransportBearerIndication-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BroadcastReference ::= BIT STRING (SIZE (24))
-- -----
-- ------
Cause ::= CHOICE {
   radioNetwork
                          CauseRadioNetwork,
                      CauseTransport,
   transport
   protocol
                          CauseProtocol,
                          CauseMisc,
   misc
CauseMisc ::= ENUMERATED {
   control-processing-overload,
   hardware-failure,
   oam-intervention,
   not-enough-user-plane-processing-resources,
   unspecified,
CauseProtocol ::= ENUMERATED {
   transfer-syntax-error,
   abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
   message-not-compatible-with-receiver-state,
   semantic-error,
   unspecified,
   abstract-syntax-error-falsely-constructed-message,
CauseRadioNetwork ::= ENUMERATED {
   unknown-C-ID,
   cell-not-available,
   power-level-not-supported,
   dl-radio-resources-not-available,
   ul-radio-resources-not-available,
   rl-already-ActivatedOrAllocated,
   nodeB-Resources-unavailable,
   measurement-not-supported-for-the-object,
```

```
combining-resources-not-available,
    requested-configuration-not-supported,
    synchronisation-failure,
    priority-transport-channel-established,
    sIB-Origination-in-Node-B-not-Supported,
    requested-tx-diversity-mode-not-supported,
    unspecified,
    bCCH-scheduling-error.
    measurement-temporarily-not-available,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    s-cpich-not-supported,
    combining-not-supported,
    ul-sf-not-supported,
    dl-SF-not-supported,
    common-transport-channel-type-not-supported,
    dedicated-transport-channel-type-not-supported,
    downlink-shared-channel-type-not-supported,
    uplink-shared-channel-type-not-supported,
    cm-not-supported,
    tx-diversity-no-longer-supported,
    unknown-Local-Cell-ID,
    . . . ,
    number-of-UL-codes-not-supported,
    information-temporarily-not-available,
    information-provision-not-supported-for-the-object,
    cell-synchronisation-not-supported,
    cell-synchronisation-adjustment-not-supported,
    dpc-mode-change-not-supported,
    iPDL-already-activated,
    iPDL-not-supported,
    iPDL-parameters-not-available,
    frequency-acquisition-not-supported,
    power-balancing-status-not-compatible,
    requested-typeofbearer-re-arrangement-not-supported,
    signalling-Bearer-Re-arrangement-not-supported,
    bearer-Re-arrangement-needed,
    delayed-activation-not-supported,
    rl-timing-adjustment-not-supported,
    mich-not-supported,
    f-DPCH-not-supported,
    modification-period-not-available,
    pLCCH-not-supported,
    continuous-packet-connectivity-DTX-DRX-operation-not-available,
    continuous-packet-connectivity-UE-DTX-Cycle-not-available,
    mIMO-not-available,
    e-DCH-MACdPDU-SizeFormat-not-available,
    multi-Cell-operation-not-supported
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
```

```
unspecified,
CCTrCH-ID ::= INTEGER (0..15)
Cell-ERNTI-Status-Information
                                    ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF Cell-ERNTI-Status-Information-Item
Cell-ERNTI-Status-Information-Item ::= SEQUENCE {
    c-ID
                                                    C-ID,
                                                    Vacant-ERNTI,
    vacant-ERNTI
    . . .
Vacant-ERNTI
                    ::= SEQUENCE (SIZE (1..maxERNTItoRelease)) OF E-RNTI
CellParameterID ::= INTEGER (0..127,...)
CellPortionID ::= INTEGER (0..maxNrOfCellPortionsPerCell-1,...)
CellSyncBurstCode ::= INTEGER(0..7, ...)
CellSyncBurstCodeShift ::= INTEGER(0..7)
CellSyncBurstRepetitionPeriod ::= INTEGER (0..4095)
CellSyncBurstSIR ::= INTEGER (0..31)
CellSyncBurstTiming ::= CHOICE {
    initialPhase
                            INTEGER (0..1048575,...),
    steadyStatePhase
                           INTEGER (0..255,...)
CellSyncBurstTimingLCR ::= CHOICE {
    initialPhase
                            INTEGER (0..524287,...),
    steadyStatePhase
                            INTEGER (0..127,...)
CellSyncBurstTimingThreshold ::= INTEGER(0..254)
CFN ::= INTEGER (0..255)
ChipOffset ::= INTEGER (0..38399)
-- Unit Chip
C-ID ::= INTEGER (0..65535)
Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
```

```
CodeRate ::= INTEGER (0..63)
CodeRate-short ::= INTEGER (0..10)
CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
    SEOUENCE {
       dl-Cost
                    INTEGER (0..65535),
       ul-Cost
                    INTEGER (0..65535),
                            ProtocolExtensionContainer { { CommonChannelsCapacityConsumptionLaw-ExtIEs } }
       iE-Extensions
                                                                                                                        OPTIONAL,
        . . .
CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-EDCH-Capability ::= ENUMERATED {
    common-EDCH-capable,
    common-EDCH-non-capable
Common-EDCH-System-InformationFDD ::= SEQUENCE {
    common-E-DCH-UL-DPCH-Information
                                                    Common-E-DCH-UL-DPCH-InfoItem
                                                                                                                             OPTIONAL,
    common-E-DCH-EDPCH-Information
                                                    Common-E-DCH-EDPCH-InfoItem
                                                                                                                             OPTIONAL,
    common-E-DCH-Information
                                                    Common-E-DCH-InfoItem
                                                                                                                             OPTIONAL,
    common-E-DCH-HSDSCH-Information
                                                    Common-E-DCH-HSDSCH-InfoItem
                                                                                                                             OPTIONAL,
    common-E-DCH-Preamble-Control-Information
                                                    Common-E-DCH-Preamble-Control-InfoItem
                                                                                                                             OPTIONAL,
    common-E-DCH-FDPCH-Information
                                                    Common-E-DCH-FDPCH-InfoItem
                                                                                                                             OPTIONAL,
    common-E-DCH-Resource-Combination-Information
                                                    Common-E-DCH-Resource-Combination-InfoList
                                                                                                                             OPTIONAL,
    ul-common-E-DCH-MACflow-Specific-Information
                                                    Ul-common-E-DCH-MACflow-Specific-InfoList
                                                                                                                              OPTIONAL,
                                                    ProtocolExtensionContainer { { Common-EDCH-System-InformationFDD-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
Common-EDCH-System-InformationFDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-UL-DPCH-InfoItem ::= SEQUENCE {
                                        UL-DPCCH-SlotFormat,
    uL-DPCCH-SlotFormat
   uL-SIR
                                        UL-SIR,
    dPC-Mode
                                        DPC-Mode,
                                        ProtocolExtensionContainer { Common-E-DCH-UL-DPCH-InfoItem-ExtIEs} }
   iE-Extensions
                                                                                                                                 OPTIONAL,
Common-E-DCH-UL-DPCH-InfoItem-ExtIES NBAP-PROTOCOL-EXTENSION ::=
    . . .
```

```
Common-E-DCH-EDPCH-InfoItem ::= SEQUENCE {
    maxSet-E-DPDCHs
                                                 Max-Set-E-DPDCHs.
    ul-PunctureLimit
                                                 PunctureLimit.
    e-TFCS-Information
                                                 E-TFCS-Information,
    e-TTI
                                                 E-TTI.
                                                 E-DPCCH-PO,
    e-DPCCH-PO
                                                 E-RGCH-2-IndexStepThreshold
    e-RGCH-2-IndexStepThreshold
                                                                                                  OPTIONAL,
    e-RGCH-3-IndexStepThreshold
                                                 E-RGCH-3-IndexStepThreshold
                                                                                                  OPTIONAL,
    hARQ-Info-for-E-DCH
                                                 HARQ-Info-for-E-DCH,
                                                 ProtocolExtensionContainer { { Common-E-DCH-EDPCH-InfoItem-ExtIEs} }
    iE-Extensions
                                                                                                                                     OPTIONAL,
Common-E-DCH-EDPCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Common-E-DCH-InfoItem
                        ::= SEQUENCE {
    e-DCH-Reference-Power-Offset
                                                 E-DCH-Reference-Power-Offset
                                                                                                  OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                 E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                  OPTIONAL,
    max-EDCH-Resource-Allocation-for-CCCH
                                                 Max-EDCH-Resource-Allocation-for-CCCH,
    max-Period-for-Collistion-Resolution
                                                 Max-Period-for-Collistion-Resolution,
                                                 Max-TB-Size
    max-TB-Size
                                                                                                  OPTIONAL,
    common-E-DCH-ImplicitRelease-Indicator
                                                 BOOLEAN,
    iE-Extensions
                                                 ProtocolExtensionContainer { { Common-E-DCH-InfoItem-ExtIEs} } }
                                                                                                                                  OPTIONAL,
    . . .
Common-E-DCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-HSDSCH-InfoItem
                                 ::= SEOUENCE {
    cgiFeedback-CycleK
                                                 CQI-Feedback-Cycle,
    cgiRepetitionFactor
                                                 CQI-RepetitionFactor
                                                                                              OPTIONAL.
    -- This IE shall be present if the CQI Feedback Cycle k is greater than 0
    ackNackRepetitionFactor
                                                AckNack-RepetitionFactor,
    cqiPowerOffset
                                                 COI-Power-Offset,
    ackPowerOffset
                                                Ack-Power-Offset,
    nackPowerOffset
                                                 Nack-Power-Offset,
    measurement-Power-Offset
                                                 Measurement-Power-Offset,
    iE-Extensions
                                                 ProtocolExtensionContainer { { Common-E-DCH-HSDSCH-InfoItem-ExtIEs} }
                                                                                                                                     OPTIONAL
Common-E-DCH-HSDSCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-Preamble-Control-InfoItem ::= SEQUENCE {
                                                 PreambleSignatures,
    common-E-DCH-PreambleSignatures
    scramblingCodeNumber
                                                 ScramblingCodeNumber,
    e-AI-Indicator
                                            E-AI-Indicator
                                                                                 OPTIONAL,
    common-E-DCH-AICH-Information
                                                 Common-E-DCH-AICH-Information
                                                                                                                      OPTIONAL,
```

```
iE-Extensions
   OPTIONAL.
Common-E-DCH-Preamble-Control-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-AICH-Information
                              ::= SEOUENCE {
   commonPhysicalChannelID
                                            CommonPhysicalChannelID,
   aICH-TransmissionTiming
                                            AICH-TransmissionTiming,
   fdd-dl-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber,
   aICH-Power
                                            AICH-Power.
   sTTD-Indicator
                                            STTD-Indicator,
   iE-Extensions
                                            ProtocolExtensionContainer { { Common-E-DCH-AICH-Information-ExtIEs} }
                                                                                                                  OPTIONAL,
Common-E-DCH-AICH-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                              ::= SEQUENCE {
Common-E-DCH-FDPCH-InfoItem
   f-DPCH-SlotFormat
                                            F-DPCH-SlotFormat,
   fdd-TPC-DownlinkStepSize
                                            FDD-TPC-DownlinkStepSize,
                                            iE-Extensions
                                                                                                                        OPTIONAL,
   . . .
Common-E-DCH-FDPCH-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-Resource-Combination-InfoList::= SEQUENCE (SIZE (1.. maxNrOfCommonEDCH)) OF Common-E-DCH-Resource-Combination-InfoList-Item
Common-E-DCH-Resource-Combination-InfoList-Item
                                                 ::= SEQUENCE {
   soffset
                                            Soffset,
   f-DPCH-DL-Code-Number
                                            FDD-DL-ChannelisationCodeNumber,
   ul-DPCH-ScramblingCode
                                            UL-ScramblingCode,
   e-RGCH-E-HICH-Channelisation-Code
                                            FDD-DL-ChannelisationCodeNumber,
   e-RGCH-Signature-Sequence
                                            E-RGCH-Signature-Sequence
                                                                                                                           OPTIONAL,
   e-HICH-Signature-Sequence
                                            E-HICH-Signature-Sequence,
   iE-Extensions
                                            ProtocolExtensionContainer { { Common-E-DCH-Resource-Combination-InfoList-Item-ExtIEs} }
   OPTIONAL,
   . . .
Common-E-DCH-Resource-Combination-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Ul-common-E-DCH-MACflow-Specific-InfoList
                                                ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-InfoList-Item
Ul-common-E-DCH-MACflow-Specific-InfoList-Item
                                                     ::= SEQUENCE {
    ul-Common-MACFlowID
                                                         Common-MACFlow-ID,
    transportBearerRequestIndicator
                                                         TransportBearerRequestIndicator,
    bindingID
                                                         BindingID
                                                                                                                        OPTIONAL,
    transportLayerAddress
                                                        TransportLayerAddress
                                                                                                                        OPTIONAL,
    tnlQos
                                                         TnlQos
                                                                                                                        OPTIONAL,
    payloadCRC-PresenceIndicator
                                                         PayloadCRC-PresenceIndicator,
                                                         BundlingModeIndicator
    bundlingModeIndicator
                                                                                                                        OPTIONAL,
    common-E-DCH-MACdFlow-Specific-Information
                                                         Common-E-DCH-MACdFlow-Specific-InfoList,
    iE-Extensions
                                                         ProtocolExtensionContainer { { Ul-common-E-DCH-MACflow-Specific-InfoList-Item-ExtIEs} }
                OPTIONAL.
    . . .
Ul-common-E-DCH-MACflow-Specific-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-MACdFlow-Specific-InfoList::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF Common-E-DCH-MACdFlow-Specific-InfoList-Item
Common-E-DCH-MACdFlow-Specific-InfoList-Item
                                                     ::= SEOUENCE {
    common-e-DCH-MACdFlow-ID
                                                    E-DCH-MACdFlow-ID,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    Maximum-Number-of-Retransmissions-For-E-DCH,
    eDCH-HARO-PO-FDD
                                                    E-DCH-HARO-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                                    E-DCH-MACdFlow-Multiplexing-List
                                                                                                                                          OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                     Common-E-DCH-LogicalChannel-InfoList,
                                                     ProtocolExtensionContainer { { Common-E-DCH-MACdFlow-Specific-InfoList-Item-ExtIEs} }
    iE-Extensions
    OPTIONAL,
Common-E-DCH-MACdFlow-Specific-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-LogicalChannel-InfoList::= SEQUENCE (SIZE (1.. maxNoOfLogicalChannels)) OF Common-E-DCH-LogicalChannel-InfoList-Item
Common-E-DCH-LogicalChannel-InfoList-Item ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    maximumMACcPDU-SizeExtended
                                    MAC-PDU-SizeExtended,
                                                    ProtocolExtensionContainer { { Common-E-DCH-LogicalChannel-InfoList-Item-ExtIEs} }
    iE-Extensions
    OPTIONAL,
Common-E-DCH-LogicalChannel-InfoList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-EDCH-System-Information-ResponseFDD
                                                 ::= SEQUENCE {
```

```
ul-common-E-DCH-MACflow-Specific-InfoResponse
                                                             Ul-common-E-DCH-MACflow-Specific-InfoResponseList,
    serving-Grant-Value
                                                             E-Serving-Grant-Value,
    iE-Extensions
                                                             ProtocolExtensionContainer { { Common-EDCH-System-Information-ResponseFDD-ExtIEs} }
                OPTIONAL.
Common-EDCH-System-Information-ResponseFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Ul-common-E-DCH-MACflow-Specific-InfoResponseList
                                                         ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-
InfoResponseList-Item
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-Item
                                                              ::= SEQUENCE {
    ul-Common-MACFlowID
                                                         Common-MACFlow-ID,
                                                         BindingID
    bindingID
                                                                                                                        OPTIONAL,
    transportLayerAddress
                                                         TransportLayerAddress
                                                                                                                        OPTIONAL,
                                                         ProtocolExtensionContainer { { Ul-common-E-DCH-MACflow-Specific-InfoResponseList-Item-
    iE-Extensions
ExtIEs } }
                            OPTIONAL,
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlows-to-DeleteFDD ::= SEQUENCE (SIZE (1.. maxNrOfCommonMACFlows)) OF Common-MACFlows-to-DeleteFDD-Item
Common-MACFlows-to-DeleteFDD-Item ::= SEQUENCE {
    common-MACFlow-ID
                                                     Common-MACFlow-ID,
    iE-Extensions
                                                     ProtocolExtensionContainer { { Common-MACFlows-to-DeleteFDD-Item-ExtIEs} }
    OPTIONAL,
Common-MACFlows-to-DeleteFDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlow-ID ::= INTEGER (0..maxNrOfCommonMACFlows-1)
CommonMACFlow-Specific-InfoList ::= SEQUENCE (SIZE (1.. maxNrOfCommonMACFlows)) OF CommonMACFlow-Specific-InfoItem
CommonMACFlow-Specific-InfoItem ::= SEOUENCE {
    common-MACFlow-Id
                                                     Common-MACFlow-ID,
    bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                                 OPTIONAL,
    tnl-qos
                                                     Tnl0os
                                                                                                 OPTIONAL,
                                                     Common-MACFlow-PriorityQueue-Information
    common-MACFlow-PriorityOueue-Information
                                                                                                 OPTIONAL,
                                                     ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
```

```
CommonMACFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TransportBearerRequestIndicator
                                              CRITICALITY ignore EXTENSION TransportBearerRequestIndicator
                                                                                                                PRESENCE optional },
    -- This IE should not be contained if the MAC flow is setup in procedure, and it should be contained if the MAC flow is modified in procedure.
CommonMACFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF CommonMACFlow-Specific-InfoItem-Response
CommonMACFlow-Specific-InfoItem-Response ::= SEQUENCE {
    commonMACFlow-ID
                                                  Common-MACFlow-ID,
   bindingID
                                                  BindingID
                                                                                             OPTIONAL,
    transportLayerAddress
                                                  TransportLayerAddress
                                                                                             OPTIONAL,
   hSDSCH-Initial-Capacity-Allocation
                                                  HSDSCH-Initial-Capacity-Allocation
                                                                                             OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItem-Response-ExtIEs} }
   OPTIONAL,
    . . .
CommonMACFlow-Specific-InfoItem-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlow-PriorityQueue-Information ::= SEQUENCE (SIZE (1..maxNrOfcommonMACQueues)) OF Common-MACFlow-PriorityQueue-Item
Common-MACFlow-PriorityQueue-Item ::= SEQUENCE {
   priority-Queue-Information-for-Enhanced-FACH
                                                      Priority-Queue-Information-for-Enhanced-FACH-PCH,
       iE-Extensions
                                                      OPTIONAL,
Common-MACFlow-PriorityQueue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass
                                          TUTRANGPSAccuracyClass,
    tUTRANGANSSMeasurementAccuracyClass
                                          TUTRANGANSSAccuracyClass
CommonMeasurementType ::= ENUMERATED
    received-total-wide-band-power,
    transmitted-carrier-power,
    acknowledged-prach-preambles,
    ul-timeslot-iscp,
    notUsed-1-acknowledged-PCPCH-access-preambles,
   notUsed-2-detected-PCPCH-access-preambles,
   . . . ,
    uTRAN-GPS-Timing-of-Cell-Frames-for-UE-Positioning,
    sFN-SFN-Observed-Time-Difference,
```

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transmittedCarrierPowerOfAllCodesNotUsedForHSTransmission,
   hs-DscH-Required-Power.
   hS-DSCH-Provided-Bit-Rate.
    received-total-wide-band-power-for-cellPortion,
    transmitted-carrier-power-for-cellPortion,
    transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmission-for-cellPortion,
    upPTS-Interference,
    dLTransmissionBranchLoad,
    hS-DSCH-Required-Power-for-cell-portion,
   hS-DSCH-Provided-Bit-Rate-for-cell-portion,
    e-DCH-Provided-Bit-Rate,
    e-DCH-Non-serving-Relative-Grant-Down-Commands,
    received-Scheduled-EDCH-Power-Share.
    received-Scheduled-EDCH-Power-Share-for-cellPortion.
    uTRAN-GANSS-timing-of-cell-frames-for-UE-Positioning,
    eDCH-RACH-report
CommonMeasurementValue ::= CHOICE {
    transmitted-carrier-power
                                                      Transmitted-Carrier-Power-Value,
    received-total-wide-band-power
                                                      Received-total-wide-band-power-Value,
    acknowledged-prach-preambles
                                                      Acknowledged-PRACH-preambles-Value,
   uL-TimeslotISCP
                                                      UL-TimeslotISCP-Value,
   notUsed-1-acknowledged-PCPCH-access-preambles
                                                      NULL.
   notUsed-2-detected-PCPCH-access-preambles
                                                      NULL.
    extension-CommonMeasurementValue
                                           Extension-CommonMeasurementValue
                                   ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}
Extension-CommonMeasurementValue
Extension-CommonMeasurementValueIE NBAP-PROTOCOL-IES ::= {
     ID id-TUTRANGPSMeasurementValueInformation
                                                          CRITICALITY ignore TYPE TUTRANGPSMeasurementValueInformation
                                                                                                                         PRESENCE mandatory }
     ID id-SFNSFNMeasurementValueInformation
                                                          CRITICALITY ignore TYPE SFNSFNMeasurementValueInformation
                                                                                                                         PRESENCE mandatory }
     TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue
                                                                  PRESENCE mandatory }
     ID id-HS-DSCHRequiredPowerValueInformation
                                                          CRITICALITY ignore TYPE HS-DSCHRequiredPower
                                                                                                                         PRESENCE mandatory
     ID id-HS-DSCHProvidedBitRateValueInformation
                                                          CRITICALITY ignore TYPE HS-DSCHProvidedBitRate
                                                                                                                         PRESENCE mandatory }
     ID id-Transmitted-Carrier-Power-For-CellPortion-Value CRITICALITY ignore TYPE Transmitted-Carrier-Power-For-CellPortion-Value PRESENCE
mandatory }
    { ID id-Received-total-wide-band-power-For-CellPortion-Value
                                                                  CRITICALITY ignore TYPE Received-total-wide-band-power-For-CellPortion-Value
    PRESENCE mandatory } |
    { ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValueCRITICALITY ignore TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue PRESENCE mandatory }
    { ID id-UpPTSInterferenceValue
                                                                  CRITICALITY ignore TYPE UppTSInterferenceValue
                                                                                                                                       PRESENCE
mandatory }|
    { ID id-DLTransmissionBranchLoadValue
                                                                  CRITICALITY ignore TYPE DLTransmissionBranchLoadValue
    PRESENCE mandatory } |
    { ID id-HS-DSCHRequiredPowerValueInformation-For-CellPortion
                                                                  CRITICALITY ignore TYPE HS-DSCHRequiredPowerValueInformation-For-CellPortion
    PRESENCE mandatory } |
    { ID id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion CRITICALITY ignore TYPE HS-DSCHProvidedBitRateValueInformation-For-CellPortion
    PRESENCE mandatory } |
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{ ID id-E-DCHProvidedBitRateValueInformation
                                                                    CRITICALITY ignore TYPE E-DCHProvidedBitRate
    PRESENCE mandatory } |
    { ID id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue
                                                                    CRITICALITY ignore TYPE E-DCH-Non-serving-Relative-Grant-Down-Commands
    PRESENCE mandatory } |
      ID id-Received-Scheduled-EDCH-Power-Share-Value CRITICALITY ignore TYPE Received-Scheduled-EDCH-Power-Share-Value PRESENCE mandatory }
     ID id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value CRITICALITY ignore TYPE Received-Scheduled-EDCH-Power-Share-For-
CellPortion-Value PRESENCE mandatory } |
      ID id-TUTRANGANSSMeasurementValueInformation
                                                        CRITICALITY ignore TYPE TUTRANGANSSMeasurementValueInformation PRESENCE mandatory } |
     ID id-EDCH-RACH-Report-Value
                                                        CRITICALITY ignore TYPE EDCH-RACH-Report-Value
                                                                                                                          PRESENCE mandatory }
        -- FDD only
CommonMeasurementValueInformation ::= CHOICE {
    measurement.Available
                                CommonMeasurementAvailable,
    measurementnotAvailable
                                CommonMeasurementnotAvailable
CommonMeasurementAvailable::= SEQUENCE {
    commonmeasurementValue
                                CommonMeasurementValue,
    ie-Extensions
                                    ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }
                                                                                                                       OPTIONAL,
CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
CommonMeasurementnotAvailable ::= NULL
CommonPhysicalChannelID ::= INTEGER (0..255)
CommonPhysicalChannelID768 ::= INTEGER (0..511)
Common-PhysicalChannel-Status-Information ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
    iE-Extensions
                                        ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs} }
                                                                                                                                OPTIONAL,
Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
Common-PhysicalChannel-Status-Information768 ::= SEQUENCE {
    commonPhysicalChannelID768
                                        CommonPhysicalChannelID768,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
    iE-Extensions
                                        ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information768-ExtIEs} }
                                                                                                                                   OPTIONAL,
```

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```
Common-PhysicalChannel-Status-Information768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonTransportChannelID ::= INTEGER (0..255)
CommonTransportChannel-InformationResponse ::= SEQUENCE
    commonTransportChannelID
                                      CommonTransportChannelID,
   bindingID
                                      BindingID
                                                              OPTIONAL,
    transportLayerAddress
                                      TransportLayerAddress OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs} }
                                                                                                                           OPTIONAL,
CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-BroadcastCommonTransportBearerIndication CRITICALITY ignore EXTENSION BroadcastCommonTransportBearerIndication
                                                                                                                            PRESENCE optional
} |
     ID
           id-IPMulticastDataBearerIndication
                                                      CRITICALITY ignore EXTENSION IPMulticastDataBearerIndication
                                                                                                                            PRESENCE
optional },
Common-TransportChannel-Status-Information ::= SEQUENCE
    commonTransportChannelID
                                      CommonTransportChannelID,
    resourceOperationalState
                                      ResourceOperationalState,
    availabilityStatus
                                      AvailabilityStatus,
                                                                 iE-Extensions
                                      ProtocolExtensionContainer
                                                                                                                           OPTIONAL,
    . . .
Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationControlPortID ::= INTEGER (0..65535)
Compressed-Mode-Deactivation-Flag::= ENUMERATED {
    deactivate,
    maintain-Active
ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"
ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB
ContinuousPacketConnectivityDTX-DRX-Capability ::= ENUMERATED {
```

```
continuous-Packet-Connectivity-DTX-DRX-capable,
    continuous-Packet-Connectivity-DTX-DRX-non-capable
ContinuousPacketConnectivityDTX-DRX-Information ::= SEQUENCE
    uE-DTX-DRX-Offset
                                                UE-DTX-DRX-Offset,
                                                Enabling-Delay,
    enabling-Delay
                                                DTX-Information,
    dTX-Information
    dRX-Information
                                                DRX-Information
                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivityDTX-DRX-Information-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
ContinuousPacketConnectivityDTX-DRX-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivityDTX-DRX-Information-to-Modify ::= SEQUENCE {
    uE-DTX-DRX-Offset
                                                UE-DTX-DRX-Offset
                                                                                         OPTIONAL,
    enabling-Delay
                                                Enabling-Delay
                                                                                         OPTIONAL,
                                                DTX-Information-to-Modify
    dTX-Information-to-Modify
                                                                                         OPTIONAL,
    dRX-Information-to-Modify
                                                DRX-Information-to-Modify
                                                                                         OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivityDTX-DRX-Information-to-Modify-ExtIEs } }
           OPTIONAL,
ContinuousPacketConnectivityDTX-DRX-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivityHS-SCCH-less-Capability ::= ENUMERATED {
    continuous-Packet-Connectivity-HS-SCCH-less-capable,
    continuous-Packet-Connectivity-HS-SCCH-less-capable-non-capable
ContinuousPacketConnectivityHS-SCCH-less-Information ::= SEQUENCE (SIZE (1..maxNrOfHS-DSCH-TBSs-HS-SCCHless)) OF ContinuousPacketConnectivityHS-
SCCH-less-InformationItem
ContinuousPacketConnectivityHS-SCCH-less-InformationItem ::= SEQUENCE {
    transport-Block-Size-Index
                                            Transport-Block-Size-Index,
    hSPDSCH-Second-Code-Support
                                            HSPDSCH-Second-Code-Support
                                            ProtocolExtensionContainer { { ContinuousPacketConnectivityHS-SCCH-less-Information-ExtIEs } }
   iE-Extensions
    OPTIONAL,
ContinuousPacketConnectivityHS-SCCH-less-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
ContinuousPacketConnectivityHS-SCCH-less-Information-Response ::= SEQUENCE {
   hSPDSCH-First-Code-Index
                                       HSPDSCH-First-Code-Index.
   hSPDSCH-Second-Code-Index
                                       HSPDSCH-Second-Code-Index
                                                                            OPTIONAL.
   iE-Extensions
                                       ProtocolExtensionContainer { { ContinuousPacketConnectivityHS-SCCH-less-Information-Response-ExtIEs } }
          OPTIONAL,
ContinuousPacketConnectivityHS-SCCH-less-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ControlGAP ::= INTEGER (1..255)
CPC-Information ::= SEQUENCE {
   continuousPacketConnectivityDTX-DRX-Information
                                                             ContinuousPacketConnectivityDTX-DRX-Information
                                                                                                                     OPTIONAL,
                                                             ContinuousPacketConnectivityDTX-DRX-Information-to-Modify
   continuousPacketConnectivityDTX-DRX-Information-to-Modify
                                                                                                                     OPTIONAL,
   continuousPacketConnectivityHS-SCCH-less-Information
                                                             ContinuousPacketConnectivityHS-SCCH-less-Information
                                                                                                                     OPTIONAL,
                            ProtocolExtensionContainer { { CPC-Information-ExtIEs} }
                                                                                                                     OPTIONAL,
   iE-Extensions
   . . .
CPC-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   less-Deactivate-Indicator PRESENCE optional },
ContinuousPacketConnectivityHS-SCCH-less-Deactivate-Indicator ::= NULL
CQI-DTX-Timer ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
   -- Unit subframe
CQI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,..., v16, v32, v64}
COI-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
CQI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
CriticalityDiagnostics ::= SEQUENCE {
   procedureID
                            ProcedureID
                                                  OPTIONAL,
   triggeringMessage
                            TriggeringMessage
                                                      OPTIONAL,
   procedureCriticality
                            Criticality
                                                  OPTIONAL,
   transactionID
                            TransactionID
                                                      OPTIONAL,
   ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }
   iE-Extensions
                                                                                                        OPTIONAL,
CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
```

```
CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
       iECriticality
                            Criticality,
       iE-ID
                            ProtocolIE-ID,
        repetitionNumber
                            RepetitionNumber0
       iE-Extensions
                            ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} }
                                                                                                                        OPTIONAL,
CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
        ID id-MessageStructure
                                    CRITICALITY ignore
                                                             EXTENSION MessageStructure
                                                                                             PRESENCE optional
        ID id-TypeOfError
                                    CRITICALITY ignore
                                                             EXTENSION TypeOfError
                                                                                             PRESENCE mandatory
CRNC-CommunicationContextID ::= INTEGER (0..1048575)
CSBMeasurementID ::= INTEGER (0..65535)
CSBTransmissionID ::= INTEGER (0..65535)
Common-EDCH-System-InformationLCR ::= SEQUENCE {
    ul-common-E-DCH-MACflow-Specific-InformationLCR
                                                             Ul-common-E-DCH-MACflow-Specific-InfoListLCR
                                                                                                                                 OPTIONAL,
    common-E-PUCH-InformationLCR
                                                             Common-E-PUCH-InformationLCR
                                                                                                                                 OPTIONAL,
    e-TFCS-Information-TDD
                                                             E-TFCS-Information-TDD
                                                                                                                                 OPTIONAL,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                             Maximum-Number-of-Retransmissions-For-E-DCH
                                                                                                                                 OPTIONAL,
    eDCH-MACdFlow-Retransmission-Timer
                                                             E-DCH-MACdFlow-Retransmission-Timer
                                                                                                                                 OPTIONAL,
    iE-Extensions
                                                             ProtocolExtensionContainer { { Common-EDCH-System-InformationLCR-ExtIEs } }
    OPTIONAL,
Common-EDCH-System-InformationLCR-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-PUCH-InformationLCR ::= SEQUENCE {
   minCR
                                                CodeRate,
    maxCR
                                                CodeRate,
                                                HARQ-Info-for-E-DCH,
    harqInfo
    pRXdes-base-perURAFCN
                                                PRXdes-base-perURAFCN
                                                                                     OPTIONAL,
    e-PUCH-TPC-StepSize
                                                TDD-TPC-UplinkStepSize-LCR
                                                                                     OPTIONAL,
    e-AGCH-TPC-StepSize
                                                TDD-TPC-DownlinkStepSize
                                                                                     OPTIONAL,
    e-PUCH-PowerControlGAP
                                                ControlGAP
                                                                                     OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { Common-E-PUCH-InformationLCR-ExtIEs } }
                                                                                                                           OPTIONAL,
    . . .
Common-E-PUCH-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
PRXdes-base-perURAFCN ::= SEOUENCE (SIZE (1.. maxFrequencyinCell)) OF PRXdes-base-Item
PRXdes-base-Item ::= SEQUENCE {
    pRXdes-base
                                                PRXdes-base,
    uARFCN
                                                UARFCN
                                                                                                 OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { PRXdes-base-Item-ExtIEs} } 
                                                                                                                        OPTIONAL,
PRXdes-base-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Ul-common-E-DCH-MACflow-Specific-InfoListLCR ::= SEOUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR
Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR
                                                          ::= SEQUENCE {
    ul-Common-MACFlowIDLCR
                                                         Common-MACFlow-ID-LCR,
    transportBearerRequestIndicator
                                                         TransportBearerRequestIndicator
                                                                                                                        OPTIONAL,
    bindingID
                                                         BindingID
                                                                                                                        OPTIONAL,
    transportLayerAddress
                                                         TransportLayerAddress
                                                                                                                        OPTIONAL,
    tnl0os
                                                         Tnl0os
                                                                                                                        OPTIONAL,
    payloadCRC-PresenceIndicator
                                                         PayloadCRC-PresenceIndicator
                                                                                                                        OPTIONAL,
    common-E-DCH-MACdFlow-Specific-InformationLCR
                                                         Common-E-DCH-MACdFlow-Specific-InfoListLCR
                                                                                                                        OPTIONAL,
    uARFCN
                                                                                                                        OPTIONAL,
    iE-Extensions
                                                         ProtocolExtensionContainer { { Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR-ExtIEs} }
                    OPTIONAL,
Ul-common-E-DCH-MACflow-Specific-InfoList-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-MACdFlow-Specific-InfoListLCR ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlowsLCR)) OF Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR
Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR
                                                     ::= SEQUENCE {
    common-e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID-LCR,
                                                     Maximum-Number-of-Retransmissions-For-E-DCH
    maximum-Number-of-Retransmissions-For-E-DCH
                                                                                                                        OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                                        OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                     Common-E-DCH-LogicalChannel-InfoList
                                                                                                                        OPTIONAL,
    eDCH-HARQ-PO-TDD
                                                     E-DCH-HARQ-PO-TDD
                                                                                                                        OPTIONAL,
    eDCH-MACdFlow-Retransmission-Timer
                                                     E-DCH-MACdFlow-Retransmission-Timer
                                                                                                                        OPTIONAL,
                                                     ProtocolExtensionContainer { { Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR-ExtIEs} }
    iE-Extensions
       OPTIONAL,
Common-E-DCH-MACdFlow-Specific-InfoList-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
Common-EDCH-System-Information-ResponseLCR ::= SEQUENCE {
    ul-common-E-DCH-MACflow-Specific-InfoResponseLCR
                                                                 Ul-common-E-DCH-MACflow-Specific-InfoResponseListLCR
                                                                                                                           OPTIONAL,
    common-E-AGCH-ListLCR
                                                                 Common-E-AGCH-ListLCR
                                                                                                                           OPTIONAL.
    common-E-HICH-ListLCR
                                                                 Common-E-HICH-ListLCR
                                                                                                                           OPTIONAL,
                                                                 Common-E-RNTI-Info-LCR
                                                                                                                           OPTIONAL,
    common-E-RNTI-Info-LCR
    iE-Extensions
                                                                 ProtocolExtensionContainer { { Common-EDCH-System-Information-ResponseLCR-ExtIEs} }
                    OPTIONAL,
    . . .
Common-EDCH-System-Information-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Ul-common-E-DCH-MACflow-Specific-InfoResponseListLCR ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF Ul-common-E-DCH-MACflow-Specific-
InfoResponseList-ItemLCR
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-ItemLCR ::= SEQUENCE {
    ul-Common-MACFlowID-LCR
                                                         Common-MACFlow-ID-LCR,
    bindingID
                                                         BindingID
                                                                                                                        OPTIONAL,
    transportLayerAddress
                                                        TransportLayerAddress
                                                                                                                        OPTIONAL,
    uARFCN
                                                        UARFCN
                                                                                                                        OPTIONAL,
                                                         ProtocolExtensionContainer { { Ul-common-E-DCH-MACflow-Specific-InfoResponseList-ItemLCR-
    iE-Extensions
ExtIEs } }
                            OPTIONAL.
Ul-common-E-DCH-MACflow-Specific-InfoResponseList-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
Common-E-AGCH-ListLCR ::= SEQUENCE (SIZE (1.. maxNrOfEAGCHsLCR)) OF Common-E-AGCH-ItemLCR
Common-E-AGCH-ItemLCR ::= SEQUENCE {
    e-AGCH-ID
                                                E-AGCH-Id.
    uARFCN
                                                                                                 OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Common-E-AGCH-ItemLCR-ExtIEs} }
                                                                                                                        OPTIONAL,
Common-E-AGCH-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Common-E-HICH-ListLCR ::= SEOUENCE (SIZE (1.. maxNrOfEHICHsLCR)) OF Common-E-HICH-ItemLCR
Common-E-HICH-ItemLCR ::= SEQUENCE {
    eΙ
    e-HICH-ID
                                            E-HICH-ID-LCR,
    iE-Extensions
                                            ProtocolExtensionContainer { Common-E-HICH-ItemLCR-ExtIEs} }
                                                                                                                        OPTIONAL,
```

```
Common-E-HICH-ItemLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Common-E-RNTI-Info-LCR ::= SEQUENCE (SIZE (1.. maxnrofERUCCHsLCR)) OF Common-E-RNTI-Info-ItemLCR
Common-E-RNTI-Info-ItemLCR ::= SEQUENCE {
    starting-E-RNTI
                                            E-RNTI,
    number-of-Group
                                            INTEGER (1..32),
   number-of-e-E-RNTI-perGroup
                                            INTEGER (1..7),
                                            ProtocolExtensionContainer { { Common-E-RNTI-Info-ItemLCR-ExtIEs} }
   iE-Extensions
                                                                                                                        OPTIONAL,
Common-E-RNTI-Info-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlows-to-DeleteLCR ::= SEOUENCE (SIZE (1.. maxNrOfCommonMACFlowsLCR)) OF Common-MACFlows-to-DeleteLCR-Item
Common-MACFlows-to-DeleteLCR-Item ::= SEQUENCE {
    common-MACFlow-ID-LCR
                                                     Common-MACFlow-ID-LCR,
                                                     ProtocolExtensionContainer { { Common-MACFlows-to-DeleteLCR-Item-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Common-MACFlows-to-DeleteLCR-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-MACFlow-ID-LCR ::= INTEGER (0..maxNrOfCommonMACFlowsLCR-1)
CommonMACFlow-Specific-InfoListLCR ::= SEQUENCE (SIZE (1.. maxNrOfCommonMACFlowsLCR)) OF CommonMACFlow-Specific-InfoItemLCR
CommonMACFlow-Specific-InfoItemLCR ::= SEQUENCE {
    common-MACFlow-ID-LCR
                                                     Common-MACFlow-ID-LCR,
   bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
                                                    TransportLayerAddress
    transportLayerAddress
                                                                                                 OPTIONAL,
                                                    TnlOos
                                                                                                 OPTIONAL,
    common-MACFlow-PriorityQueue-InformationLCR
                                                    Common-MACFlow-PriorityQueue-Information
                                                                                                 OPTIONAL,
    transportBearerRequestIndicator
                                                    TransportBearerRequestIndicator
                                                                                                 OPTIONAL,
    uARFCN
                                                    UARFCN
                                                                                                 OPTIONAL,
                                                    ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItemLCR-ExtIEs } }
    iE-Extensions
                                                                                                                                       OPTIONAL,
    . . .
CommonMACFlow-Specific-InfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Common-H-RNTI-InformationLCR ::= SEQUENCE (SIZE (1.. maxNrOfCommonMACFlowsLCR)) OF Common-H-RNTI-InfoItemLCR
```

```
Common-H-RNTI-InfoItemLCR ::= SEQUENCE {
    common-H-RNTI
                                                  HSDSCH-RNTI.
    iE-Extensions
                                                  ProtocolExtensionContainer { { Common-H-RNTI-InfoItemLCR-ExtIEs } }
                                                                                                                       OPTIONAL,
Common-H-RNTI-InfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Sync-InformationLCR ::= SEQUENCE {
    t.-SYNC
                                                  T-SYNC,
    t. - PROTECT
                                                  T-PROTECT,
   n-PROTECT
                                                  N-PROTECT,
   iE-Extensions
                                                  ProtocolExtensionContainer { { Sync-InformationLCR-ExtIEs } }
                                                                                                                 OPTIONAL,
Sync-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMACFlow-Specific-InfoList-ResponseLCR ::= SEQUENCE (SIZE (1..maxNrOfCommonMACFlows)) OF CommonMACFlow-Specific-InfoItem-ResponseLCR
CommonMACFlow-Specific-InfoItem-ResponseLCR ::= SEQUENCE {
    common-MACFlow-ID-LCR
                                                     Common-MACFlow-ID-LCR,
    bindingID
                                                  BindingID
                                                                                            OPTIONAL.
    transportLayerAddress
                                                  TransportLayerAddress
                                                                                           OPTIONAL,
                                                                                           OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                  HSDSCH-Initial-Capacity-Allocation
    iE-Extensions
                                                  ProtocolExtensionContainer { { CommonMACFlow-Specific-InfoItem-ResponseLCR-ExtIEs} }
    OPTIONAL,
    . . .
CommonMACFlow-Specific-InfoItem-ResponseLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  _____
DATA-ID ::= INTEGER (0..3)
DCH-ID ::= INTEGER (0..255)
DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem
DCH-FDD-InformationItem ::= SEQUENCE {
```

```
payloadCRC-PresenceIndicator
                                   PayloadCRC-PresenceIndicator,
   ul-FP-Mode
                                  UL-FP-Mode,
   toAWS
                                  TOAWS.
   toAWE
                                  ToAWE,
   dCH-SpecificInformationList
                                  DCH-Specific-FDD-InformationList,
                                  ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                     OPTIONAL,
DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TnlQos
                                  CRITICALITY ignore
                                                                             PRESENCE optional
                                                       EXTENSION TnlQos
   . . .
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,
                                  OE-Selector,
   qE-Selector
                                  iE-Extensions
                                                                                                     OPTIONAL,
DCH-Specific-FDD-Item-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Unidirectional-DCH-Indicator
                                      CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator
                                                                                                     PRESENCE optional },
DCH-Indicator-For-E-DCH-HSDPA-Operation ::= ENUMERATED {
   dch-not-present
DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem
DCH-InformationResponseItem ::= SEQUENCE {
   dCH-ID
                                             DCH-ID,
   bindingID
                                             BindingID
                                                                  OPTIONAL,
   transportLayerAddress
                                             TransportLayerAddress OPTIONAL,
   iE-Extensions
                                             OPTIONAL,
DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     PRESENCE optional }, -- FDD
onlv
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-ExtIEs 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,
    t.oAWE
                                        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
                                        CRITICALITY ignore
                                                                 EXTENSION TnlOos
                                                                                          PRESENCE optional },
DCH-ModifySpecificInformation-FDD::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD
```

```
DCH-ModifySpecificItem-FDD::=
                              SEOUENCE {
    dCH-ID
                                                 DCH-ID.
   ul-TransportFormatSet
                                                 TransportFormatSet
                                                                            OPTIONAL.
    dl-TransportFormatSet
                                                 TransportFormatSet
                                                                            OPTIONAL,
    allocationRetentionPriority
                                                 AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                                            OPTIONAL,
                                                 FrameHandlingPriority
   iE-Extensions
                                                 OPTIONAL,
DCH-ModifySpecificItem-FDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-Unidirectional-DCH-Indicator
                                                     CRITICALITY reject
                                                                            EXTENSION Unidirectional-DCH-Indicator
                                                                                                                   PRESENCE optional },
TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD
DCH-ModifyItem-TDD ::= SEQUENCE {
   ul-FP-Mode
                                      III.-FP-Mode
                                                     OPTIONAL,
   toAWS
                                      ToAWS
                                                     OPTIONAL,
   TOAWE
                                                     OPTIONAL,
                                      TOAWE
    transportBearerRequestIndicator
                                      TransportBearerRequestIndicator,
    dCH-SpecificInformationList
                                     DCH-ModifySpecificInformation-TDD,
    iE-Extensions
                                      ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-ExtIEs} } 
                                                                                                                   OPTIONAL,
    . . .
TDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlOos
                                      CRITICALITY ignore
                                                            EXTENSION TnlOos
                                                                                   PRESENCE optional },
    . . .
DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD
DCH-ModifySpecificItem-TDD ::= SEQUENCE {
   dCH-ID
                                                 DCH-ID,
   ul-CCTrCH-ID
                                                 CCTrCH-ID
                                                                            OPTIONAL,
    dl-CCTrCH-ID
                                                 CCTrCH-ID
                                                                            OPTIONAL,
    ul-TransportFormatSet
                                                 TransportFormatSet
                                                                            OPTIONAL,
    dl-TransportFormatSet
                                                 TransportFormatSet
                                                                            OPTIONAL,
    allocationRetentionPriority
                                                 AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                 FrameHandlingPriority
                                                                            OPTIONAL,
   iE-Extensions
                                                 OPTIONAL,
DCH-ModifySpecificItem-TDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
   SEQUENCE {
```

```
dl-Cost-1
                        INTEGER (0..65535),
       dl-Cost-2
                        INTEGER (0..65535),
       ul-Cost-1
                        INTEGER (0..65535).
       ul-Cost-2
                        INTEGER (0..65535),
        iE-Extensions
                            ProtocolExtensionContainer { { DedicatedChannelsCapacityConsumptionLaw-ExtIEs } }
                                                                                                                       OPTIONAL.
DedicatedChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementType ::= ENUMERATED {
    sir.
    sir-error,
    transmitted-code-power,
    rx-timing-deviation,
    round-trip-time,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR,
    hs-sich-quality,
    best-Cell-Portions.
    rx-timing-deviation-768,
    rx-timing-deviation-384-extended
DedicatedMeasurementValue ::= CHOICE {
    sIR-Value
                                    SIR-Value,
    sIR-ErrorValue
                                    SIR-Error-Value,
    transmittedCodePowerValue
                                        Transmitted-Code-Power-Value
                                        RSCP-Value,
    rxTimingDeviationValue
                                        Rx-Timing-Deviation-Value,
    roundTripTime
                                        Round-Trip-Time-Value,
    extension-DedicatedMeasurementValue
                                            Extension-DedicatedMeasurementValue
Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}
Extension-DedicatedMeasurementValueIE NBAP-PROTOCOL-IES ::= {
     ID id-Rx-Timing-Deviation-Value-LCR
                                            CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR
                                                                                                              PRESENCE mandatory } |
      ID id-Angle-Of-Arrival-Value-LCR
                                                CRITICALITY reject TYPE Angle-Of-Arrival-Value-LCR
                                                                                                              PRESENCE mandatory
      ID id-HS-SICH-Reception-Ouality
                                                CRITICALITY reject TYPE HS-SICH-Reception-Quality-Value
                                                                                                              PRESENCE mandatory }
      ID id-Best-Cell-Portions-Value
                                                CRITICALITY reject TYPE Best-Cell-Portions-Value
                                                                                                              PRESENCE mandatory
      ID id-Rx-Timing-Deviation-Value-768
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-768
                                                                                                              PRESENCE mandatory
      ID id-Rx-Timing-Deviation-Value-384-ext
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-384-ext
                                                                                                              PRESENCE mandatory }
     ID id-Extended-Round-Trip-Time-Value
                                                CRITICALITY reject TYPE Extended-Round-Trip-Time-Value
                                                                                                              PRESENCE mandatory },
```

```
DedicatedMeasurementValueInformation ::= CHOICE {
   measurementAvailable
                             DedicatedMeasurementAvailable,
   measurementnotAvailable
                             DedicatedMeasurementnotAvailable
DedicatedMeasurementAvailable::= SEQUENCE {
   dedicatedmeasurementValue
                                 DedicatedMeasurementValue,
   cFN
                                 CFN
                                                          OPTIONAL,
   ie-Extensions
                                 ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }
                                                                                                            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
                                                                                OPTIONAL, --FDD Only
   propagation-delay
                         PropagationDelay
   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,
    . . .
```

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```
Deactivate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Execution-Type ::= CHOICE {
    synchronised CFN,
    unsynchronised NULL
DeltaSIR
                      ::= INTEGER (0..30)
-- Unit dB, Step 0.1 dB, Range 0..3 dB.
DGANSSCorrections ::= SEQUENCE {
    dGANSS-ReferenceTime
                                      INTEGER (0..119),
    dGANSS-Information
                                      DGANSS-Information,
    ie-Extensions
                                      OPTIONAL,
DGANSSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DGANSS-Corrections-Reg ::= SEQUENCE {
    dGANSS-Signal-ID
                                      BIT STRING (SIZE (8)),
    ie-Extensions
                                      ProtocolExtensionContainer { { DGANSS-Corrections-Req-ExtIEs } }
                                                                                                               OPTIONAL,
DGANSS-Corrections-Req-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-ID
                              CRITICALITY ignore EXTENSION GANSS-ID
                                                                                 PRESENCE
                                                                                            optional },
    . . .
DGANSS-Information ::= SEQUENCE (SIZE (1..maxSgnType)) OF DGANSS-InformationItem
DGANSS-InformationItem ::= SEQUENCE {
   qANSS-SignalId
                                      GANSS-Signal-ID
                                                                                                               OPTIONAL
    qANSS-StatusHealth
                                      GANSS-StatusHealth,
-- The following IE shall be present if the Status Health IE value is not equal to 'no data' or 'invalid data'
    dGANSS-SignalInformation
                                      DGANSS-SignalInformation
                                                                                                               OPTIONAL,
    ie-Extensions
                                      ProtocolExtensionContainer { { DGANSS-InformationItem-ExtIEs } }
                                                                                                               OPTIONAL,
DGANSS-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DGANSS-SignalInformation ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF DGANSS-SignalInformationItem
DGANSS-SignalInformationItem ::= SEQUENCE
   sat.Id
                                 INTEGER (0..63),
   qANSS-iod
                                 BIT STRING (SIZE (10)),
   udre
                                 UDRE,
                                 INTEGER (-2047..2047),
   ganss-prc
                                 INTEGER (-127..127),
   ganss-rrc
   ie-Extensions
                                 OPTIONAL,
DGANSS-SignalInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DGANSSThreshold ::= SEQUENCE {
   pRCDeviation
                                 PRCDeviation,
                                 ProtocolExtensionContainer { { DGANSSThreshold-ExtIEs } }
   ie-Extensions
                                                                                                OPTIONAL,
DGANSSThreshold-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DGPSCorrections ::= SEQUENCE {
  gpstow
                    GPSTOW,
  status-health
                    GPS-Status-Health,
  satelliteinfo
                    SAT-Info-DGPSCorrections,
                    ie-Extensions
                                                                         OPTIONAL,
DGPSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DGPSThresholds ::= SEQUENCE {
  prcdeviation
                   PRCDeviation,
  ie-Extensions
                   OPTIONAL,
```

```
DGPSThresholds-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DiscardTimer ::= ENUMERATED
\{v20, v40, v60, v80, v100, v120, v140, v160, v180, v200, v250, v300, v400, v500, v750, v1000, v1250, v1500, v1750, v2000, v2500, v3000, v3500, v4000, v4500, v5000, v7500, v1000, v100
DiversityControlField ::= ENUMERATED
          may,
          must,
          must-not,
          . . .
DiversityMode ::= ENUMERATED {
          none,
          sTTD,
          closed-loop-model,
          not-used-closed-loop-mode2,
DL-DPCH-SlotFormat ::= INTEGER (0..16,...)
DL-DPCH-TimingAdjustment ::= ENUMERATED {
          timing-advance,
          timing-delay
DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem
DL-Timeslot-InformationItem ::= SEOUENCE {
          timeSlot
                                                                                                               TimeSlot,
          midambleShiftAndBurstType
                                                                                                               MidambleShiftAndBurstType,
                                                                                                               TFCI-Presence,
          tFCI-Presence
          dL-Code-Information
                                                                                                               TDD-DL-Code-Information,
                                                                                                               iE-Extensions
                                                                                                                                                                                                                                                                                                           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,
          tFCI-Presence
                                                                                                               TFCI-Presence,
          dL-Code-LCR-Information
                                                                                                               TDD-DL-Code-LCR-Information,
```

```
ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
DL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Initial-DL-Power-TimeslotLCR-InformationItem
                                                                                                                        PRESENCE optional } |
                                                            CRITICALITY ignore
                                                                                  EXTENSION DL-Power
    -- Applicable to 1.28Mcps TDD only
    { ID id-Maximum-DL-Power-TimeslotLCR-InformationItem
                                                            CRITICALITY ignore
                                                                                  EXTENSION DL-Power
                                                                                                                        PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-Minimum-DL-Power-TimeslotLCR-InformationItem CRITICALITY ignore
                                                                                                                        PRESENCE optional },
                                                                                 EXTENSION DL-Power
    -- Applicable to 1.28Mcps TDD only
DL-Timeslot768-Information ::= SEOUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot768-InformationItem
DL-Timeslot768-InformationItem ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType768
                                            MidambleShiftAndBurstType768,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-768-Information
                                            TDD-DL-Code-768-Information,
                                            ProtocolExtensionContainer { { DL-Timeslot768-InformationItem-ExtIEs} }
    iE-Extensions
DL-Timeslot768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-FrameType ::= ENUMERATED
    typeA,
    typeB,
    . . .
DL-or-Global-CapacityCredit ::= INTEGER (0..65535)
DL-Power ::= INTEGER (-350..150)
-- Value = DL-Power/10
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB
DLPowerAveragingWindowSize ::= INTEGER (1..60)
DL-PowerBalancing-Information ::= SEQUENCE {
    powerAdiustmentType
                                        PowerAdjustmentType,
    dLReferencePower
                                        DL-Power
                                                        OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
                                        DL-ReferencePowerInformationList
    dLReferencePowerList-DL-PC-Rqst
                                                                                 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'
    adjustmentRatio
                                        ScaledAdjustmentRatio OPTIONAL,
```

```
-- 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-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-ReferencePowerInformationList
                                       ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem
DL-ReferencePowerInformationItem ::= SEQUENCE {
    rL-ID
                                RL-ID.
    dl-Reference-Power
                               DL-Power,
   iE-Extensions
                                ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
DL-ReferencePowerInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dL-PowerBalancing-Activated
DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {
    dL-PowerBalancing-Updated
DL-ScramblingCode ::= INTEGER (0..15)
-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --
DL-TimeslotISCP ::= INTEGER (0..91)
DL-TimeslotISCPInfo ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-TimeslotISCPInfoItem
DL-TimeslotISCPInfoItem ::= SEQUENCE
    timeSlot
                               TimeSlot,
    dL-TimeslotISCP
                                DL-TimeslotISCP,
                               ProtocolExtensionContainer { {DL-TimeslotISCPInfoItem-ExtIEs} }
    iE-Extensions
                                                                                                                       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
    not-Used-puncturing,
    sFdiv2.
    higher-layer-scheduling,
DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRgst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-
ReconfRast
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst::= SEQUENCE {
    timeSlot
                                                TimeSlotLCR,
    midambleShiftAndBurstType
                                                MidambleShiftLCR,
    dl-HS-PDSCH-Codelist-LCR-PSCH-ReconfRqst
                                                    DL-HS-PDSCH-Codelist-LCR-PSCH-ReconfRqst,
    maxHSDSCH-HSSCCH-Power
                                                MaximumTransmissionPower
    iE-Extensions
                                                ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
        OPTIONAL,
DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DL-HS-PDSCH-Codelist-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSPDSCHs)) OF TDD-ChannelisationCode
DPC-Mode ::= ENUMERATED {
    mode0,
    mode1,
DPCH-ID ::= INTEGER (0..239)
DPCH-ID768 ::= INTEGER (0..479)
DRX-Information ::= SEQUENCE {
    uE-DRX-Cycle
                                            UE-DRX-Cycle,
    inactivity-Threshold-for-UE-DRX-Cycle
                                                                    Inactivity-Threshold-for-UE-DRX-Cycle,
    inactivity-Threshold-for-UE-Grant-Monitoring
                                                                    Inactivity-Threshold-for-UE-Grant-Monitoring,
    uE-DRX-Grant-Monitoring
                                            UE-DRX-Grant-Monitoring,
    iE-Extensions
                                            ProtocolExtensionContainer { {DRX-Information-ExtIEs} } OPTIONAL,
```

```
DRX-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DRX-Information-to-Modify ::= CHOICE {
                   DRX-Information-to-Modify-Items,
   deactivate
                   NULL,
DRX-Information-to-Modify-Items ::= SEQUENCE {
   uE-DRX-Cycle
                                                                 UE-DRX-Cycle
                                                                                                               OPTIONAL,
   inactivity-Threshold-for-UE-DRX-Cycle
                                                                 Inactivity-Threshold-for-UE-DRX-Cycle
                                                                                                               OPTIONAL,
                                                                 Inactivity-Threshold-for-UE-Grant-Monitoring
   inactivity-Threshold-for-UE-Grant-Monitoring
                                                                                                               OPTIONAL,
                                                                 UE-DRX-Grant-Monitoring
   uE-DRX-Grant-Monitoring
                                                                                                               OPTIONAL,
                                               ProtocolExtensionContainer { {DRX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
   iE-Extensions
DRX-Information-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DRX-Interruption-by-HS-DSCH ::= ENUMERATED {
   drx-Interruption-Configured,
   drx-Interruption-Not-Configured,
    . . .
DSCH-ID ::= INTEGER (0..255)
DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem
DSCH-InformationResponseItem ::= SEQUENCE {
   dscH-ID
                                                  DSCH-ID,
   bindingID
                                                  BindingID
                                                                             OPTIONAL,
   transportLayerAddress
                                                                             OPTIONAL,
                                                  TransportLayerAddress
                                                  iE-Extensions
                                                                                                                          OPTIONAL,
DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem
DSCH-TDD-InformationItem ::= SEQUENCE {
   dscH-ID
                                          DSCH-ID,
   cCTrCH-ID
                                          CCTrCH-ID,
```

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transportFormatSet
                                           TransportFormatSet,
    allocationRetentionPriority
                                           AllocationRetentionPriority,
    frameHandlingPriority
                                           FrameHandlingPriority,
    toAWS
                                           ToAWS,
    toAWE
                                           TOAWE.
                                           ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID
                                       CRITICALITY ignore
                                                                                                                 PRESENCE optional } |
                                                              EXTENSION
                                                                          BindingID
   -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-transportlayeraddress
                                       CRITICALITY ignore
                                                              EXTENSION
                                                                          TransportLayerAddress
                                                                                                                 PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-TnlOos
                                       CRITICALITY ignore
                                                                                                                 PRESENCE optional },
                                                              EXTENSION TnlOos
DsField ::= BIT STRING (SIZE (8))
DTX-Cycle-2ms-Items ::= SEQUENCE {
   uE-DTX-Cycle1-2ms
                                   UE-DTX-Cycle1-2ms,
   uE-DTX-Cycle2-2ms
                                   UE-DTX-Cycle2-2ms,
   mAC-DTX-Cvcle-2ms
                                   MAC-DTX-Cvcle-2ms,
                                               ProtocolExtensionContainer { { DTX-Cycle-2ms-Items-ExtIEs} }
   iE-Extensions
                                                                                                                       OPTIONAL,
DTX-Cycle-2ms-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DTX-Cycle-2ms-to-Modify-Items ::= SEQUENCE
   uE-DTX-Cycle1-2ms
                                   UE-DTX-Cycle1-2ms,
   uE-DTX-Cycle2-2ms
                                   UE-DTX-Cycle2-2ms,
   mAC-DTX-Cycle-2ms
                                   MAC-DTX-Cycle-2ms,
   iE-Extensions
                                               ProtocolExtensionContainer { { DTX-Cycle-2ms-to-Modify-Items-ExtIEs} } }
                                                                                                                          OPTIONAL,
DTX-Cycle-2ms-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DTX-Cvcle-10ms-Items ::= SEOUENCE {
   uE-DTX-Cycle1-10ms
                                   UE-DTX-Cycle1-10ms,
   uE-DTX-Cycle2-10ms
                                   UE-DTX-Cycle2-10ms,
   mAC-DTX-Cycle-10ms
                                   MAC-DTX-Cycle-10ms,
   iE-Extensions
                                               OPTIONAL
    . . .
DTX-Cycle-10ms-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
DTX-Cycle-10ms-to-Modify-Items ::= SEQUENCE {
    uE-DTX-Cycle1-10ms
                                    UE-DTX-Cycle1-10ms,
    uE-DTX-Cycle2-10ms
                                    UE-DTX-Cycle2-10ms,
    mAC-DTX-Cycle-10ms
                                    MAC-DTX-Cycle-10ms,
    iE-Extensions
                                                ProtocolExtensionContainer { { DTX-Cycle-10ms-to-Modify-Items-ExtIEs} } 
                                                                                                                                 OPTIONAL,
    . . .
DTX-Cycle-10ms-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DTX-Information ::= SEQUENCE {
    e-DCH-TTI-Length
                                        E-DCH-TTI-Length,
    inactivity-Threshold-for-UE-DTX-Cycle2
                                                             Inactivity-Threshold-for-UE-DTX-Cycle2,
    uE-DTX-Long-Preamble
                                        UE-DTX-Long-Preamble,
    mAC-Inactivity-Threshold
                                            MAC-Inactivity-Threshold
    cQI-DTX-Timer
                                COI-DTX-Timer,
    uE-DPCCH-burst1
                                UE-DPCCH-burst1,
                                UE-DPCCH-burst2,
    uE-DPCCH-burst2
                                ProtocolExtensionContainer { {DTX-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DTX-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DTX-Information-to-Modify ::= CHOICE {
    modify
                    DTX-Information-to-Modify-Items,
    deactivate
                    NULL,
    . . .
DTX-Information-to-Modify-Items ::= SEQUENCE {
    e-DCH-TTI-Length-to-Modify
                                    E-DCH-TTI-Length-to-Modify
                                                                         OPTIONAL,
    inactivity-Threshold-for-UE-DTX-Cycle2
                                                            Inactivity-Threshold-for-UE-DTX-Cycle2
                                                                                                                  OPTIONAL,
    uE-DTX-Long-Preamble
                                    UE-DTX-Long-Preamble
                                                                         OPTIONAL,
    mAC-Inactivity-Threshold
                                        MAC-Inactivity-Threshold
                                                                                 OPTIONAL,
    cQI-DTX-Timer
                                    CQI-DTX-Timer
                                                                         OPTIONAL,
    uE-DPCCH-burst1
                                    UE-DPCCH-burst1
                                                                         OPTIONAL,
    uE-DPCCH-burst2
                                    UE-DPCCH-burst2
                                                                         OPTIONAL,
                                    ProtocolExtensionContainer { {DTX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
    iE-Extensions
DTX-Information-to-Modify-Items-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DwPCH-Power ::= INTEGER (-150..400,...)
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
-- -----
E-AGCH-Table-Choice ::= ENUMERATED{table16B, table16B-12, ...}
E-AGCH-FDD-Code-Information ::= CHOICE {
                          E-AGCH-FDD-Code-List,
   replace
   remove
                          NULL,
E-AGCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfE-AGCHs)) OF FDD-DL-ChannelisationCodeNumber
E-AI-Capability ::= ENUMERATED {
   e-AI-capable,
    e-AI-non-capable
E-AI-Indicator ::= BOOLEAN
E-DCH-Capability ::= ENUMERATED {
   e-DCH-capable,
   e-DCH-non-capable
E-DCHCapacityConsumptionLaw ::= SEQUENCE {
       e-DCH-SF-allocation E-DCH-SF-allocation,
                      INTEGER (0..65535)
       dl-Cost-1
                                                                                                                   OPTIONAL,
       dl-Cost-2
                          INTEGER (0..65535)
ProtocolExtensionContainer { { E-DCHCapacityConsumptionLaw-ExtIEs } }
                                                                                                                   OPTIONAL,
                                                                                                                   OPTIONAL,
       iE-Extensions
    . . .
E-DCHCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-CapacityConsumptionLaw ::= SEQUENCE {
       ul-Cost
                      INTEGER (0..65535),
       dl-Cost
                          INTEGER (0..65535)
                                                                                                                 OPTIONAL,
                              ProtocolExtensionContainer { { E-DCH-TDD-CapacityConsumptionLaw-ExtIEs } }
       iE-Extensions
                                                                                                                   OPTIONAL,
E-DCH-TDD-CapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
E-DCH-SF-allocation ::= SEQUENCE ( SIZE(1..maxNrOfCombEDPDCH) ) OF
    SEQUENCE {
       ul-Cost-1
                        INTEGER (0..65535),
       ul-Cost-2
                        INTEGER (0..65535),
                            ProtocolExtensionContainer { { E-DCH-SF-allocation-ExtIEs } }
       iE-Extensions
                                                                                                 OPTIONAL,
E-DCH-SF-allocation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TTI2ms-Capability ::= BOOLEAN
-- True = TTI 10ms and 2ms supported for E-DCH False = only TTI 10ms supported for E-DCH
E-DCH-SF-Capability ::= ENUMERATED {
    sf64.
    sf32.
    sf16,
    sf8.
    sf4.
    sf4x2,
    sf2x2,
    sf4x2-and-sf2x2,
E-DCH-HARQ-Combining-Capability ::= ENUMERATED {
    iR-Combining-capable,
    chase-Combining-capable,
    iR-and-Chase-Combining-capable
E-DCH-DDI-Value ::= INTEGER (0..62)
E-DCH-FDD-DL-Control-Channel-Information ::= SEQUENCE
    e-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code
                                                     DL-ScramblingCode
                                                                                                                                           OPTIONAL,
                                                     FDD-DL-ChannelisationCodeNumber
    e-AGCH-Channelisation-Code
                                                                                                                                           OPTIONAL,
    primary-e-RNTI
                                                     E-RNTI
                                                                                                                                           OPTIONAL,
    secondary-e-RNTI
                                                     E-RNTI
                                                                                                                                          OPTIONAL,
    e-RGCH-E-HICH-Channelisation-Code
                                                     FDD-DL-ChannelisationCodeNumber
                                                                                                                                          OPTIONAL,
    e-RGCH-Signature-Sequence
                                                     E-RGCH-Signature-Sequence
                                                                                                                                          OPTIONAL,
    e-HICH-Signature-Sequence
                                                     E-HICH-Signature-Sequence
                                                                                                                                          OPTIONAL,
    serving-Grant-Value
                                                     E-Serving-Grant-Value
                                                                                                                                           OPTIONAL,
                                                     E-Primary-Secondary-Grant-Selector
    primary-Secondary-Grant-Selector
                                                                                                                                           OPTIONAL,
                                                     E-RGCH-Release-Indicator
    e-RGCH-Release-Indicator
    OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-FDD-DL-Control-Channel-Information-ExtIEs} }
                                                                                                                                          OPTIONAL,
```

```
E-DCH-FDD-DL-Control-Channel-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Default-Serving-Grant-in-DTX-Cycle2
                                                    CRITICALITY ignore
                                                                             EXTENSION E-Serving-Grant-Value
                                                                                                                           PRESENCE optional },
    . . .
E-DCH-FDD-Information ::= SEQUENCE {
    e-DCH-MACdFlows-Information
                                                     E-DCH-MACdFlows-Information,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                                                                                                                                          OPTIONAL,
    e-DCH-Maximum-Bitrate
                                                     E-DCH-Maximum-Bitrate
                                                                                                                                          OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                     E-DCH-Processing-Overload-Level
                                                                                                                                          OPTIONAL,
    e-DCH-Reference-Power-Offset
                                                     E-DCH-Reference-Power-Offset
                                                                                                                                          OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-FDD-Information-ExtIEs} } 
                                                                                                                                          OPTIONAL,
E-DCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                         CRITICALITY ignore EXTENSION E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                                 PRESENCE optional }
      ID id-SixteenOAM-UL-Operation-Indicator
                                                         CRITICALITY reject EXTENSION
                                                                                         SixteenOAM-UL-Operation-Indicator
                                                                                                                                 PRESENCE optional |
     ID id-E-AGCH-Table-Choice
                                                         CRITICALITY ignore EXTENSION E-AGCH-Table-Choice
                                                                                                                              PRESENCE conditional },
    -- The IE shall be present if the SixteenOAM UL Operation Indicator IE is set to 'Activate'--
E-DCH-FDD-Information-Response ::= SEOUENCE {
    e-DCH-MACdFlow-Specific-InformationResp
                                                     E-DCH-MACdFlow-Specific-InformationResp
                                                                                                                                          OPTIONAL,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                     HARO-Process-Allocation-2ms-EDCH
                                                                                                                                          OPTIONAL,
    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,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                     HARO-Process-Allocation-2ms-EDCH
                                                                                                                                          OPTIONAL,
    e-DCH-Maximum-Bitrate
                                                     E-DCH-Maximum-Bitrate
                                                                                                                                          OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                     E-DCH-Processing-Overload-Level
                                                                                                                                          OPTIONAL,
    e-DCH-Reference-Power-Offset
                                                     E-DCH-Reference-Power-Offset
                                                                                                                                          OPTIONAL,
    mACeReset-Indicator
                                                     MACeReset-Indicator
                                                                                                                                          OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-FDD-Information-to-Modify-ExtIEs} } }
    iE-Extensions
                                                                                                                                          OPTIONAL,
E-DCH-FDD-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                        CRITICALITY ignore EXTENSION
                                                                                         E-DCH-PowerOffset-for-SchedulingInfo
    PRESENCE optional }
    { ID id-SixteenQAM-UL-Operation-Indicator
                                                         CRITICALITY reject EXTENSION
                                                                                         SixteenQAM-UL-Operation-Indicator
    PRESENCE optional }
    { ID id-E-DCH-MACdPDUSizeFormat
                                                        CRITICALITY reject EXTENSION
                                                                                         E-DCH-MACdPDUSizeFormat
    PRESENCE optional } |
    { ID id-E-DCH-DL-Control-Channel-Grant-Information CRITICALITY ignore EXTENSION E-DCH-DL-Control-Channel-Grant-Information
    PRESENCE optional } |
```

```
{ ID id-E-AGCH-Table-Choice
                                                        CRITICALITY ignore EXTENSION E-AGCH-Table-Choice
    PRESENCE conditional },
    -- The IE shall be present if the SixteenOAM UL Operation Indicator IE is set to 'Activate'--
E-DCH-FDD-Update-Information ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-UpdateInformation
                                                    E-DCH-MACdFlow-Specific-UpdateInformation
                                                                                                                                         OPTIONAL,
    hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARQ-Process-Allocation-2ms-EDCH
                                                                                                                                         OPTIONAL,
                                                    ProtocolExtensionContainer { { E-DCH-FDD-Update-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-FDD-Update-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-DL-Control-Channel-Change-Information
                                                                CRITICALITY ignore EXTENSION E-DCH-DL-Control-Channel-Change-Information
    PRESENCE optional },
E-DCH-MACdFlow-Specific-UpdateInformation ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-UpdateInformation-Item
E-DCH-MACdFlow-Specific-UpdateInformation-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                    E-DCH-MACdFlow-ID,
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                                                                                                                                         OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIEs} }
    OPTIONAL,
    . . .
E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-DL-Control-Channel-Change-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF E-DCH-DL-Control-Channel-Change-Information-Item
E-DCH-DL-Control-Channel-Change-Information-Item ::= SEQUENCE {
    e-DCH-RL-ID
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Change-Information-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
E-DCH-DL-Control-Channel-Change-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-DL-Control-Channel-Grant-Information ::= SEOUENCE (SIZE (1..maxNrOfEDCHRLs)) OF E-DCH-DL-Control-Channel-Grant-Information-Item
E-DCH-DL-Control-Channel-Grant-Information-Item ::= SEQUENCE {
    e-DCH-RL-ID
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
```

```
E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-Grant-Type-Information ::= CHOICE {
    e-DCH-Non-Scheduled-Transmission-Grant
                                                E-DCH-Non-Scheduled-Transmission-Grant-Items,
    e-DCH-Scheduled-Transmission-Grant
                                                NULL.
E-DCH-LogicalChannelInformation ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelInformationItem
E-DCH-LogicalChannelInformationItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    schedulingInformation
                                    SchedulingInformation,
    mACesGuaranteedBitRate
                                    MACesGuaranteedBitRate
                                                                OPTIONAL,
    e-DCH-DDI-Value
                                    E-DCH-DDI-Value,
    mACd-PDU-Size-List
                                    E-DCH-MACdPDU-SizeList,
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelInformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
E-DCH-LogicalChannelInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MaximumMACdPDU-SizeExtended
                                            CRITICALITY reject
                                                                    EXTENSION
                                                                                MAC-PDU-SizeExtended PRESENCE optional },
    . . .
E-DCH-Maximum-Bitrate ::= INTEGER (0..5742,...,5743..11498)
E-DCH-PowerOffset-for-SchedulingInfo ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-Processing-Overload-Level ::= INTEGER (0..10,...)
E-DCH-Reference-Power-Offset ::= INTEGER (0.. maxNrOfEDCH-HARO-PO-OUANTSTEPs)
E-DCH-MACdPDU-SizeList ::= SEQUENCE (SIZE (1.. maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-MACdPDU-SizeListItem ::= SEQUENCE {
    mACdPDU-Size
                                    MACdPDU-Size,
                                    ProtocolExtensionContainer { { E-DCH-MACdPDU-SizeListItem-ExtIEs } }
    iE-Extensions
                                                                                                                 OPTIONAL,
E-DCH-MACdPDU-SizeListItem-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdPDU-SizeCapability ::= ENUMERATED {
    fixedSizeCapable,
    flexibleSizeCapable
E-DCH-MACdPDUSizeFormat ::= ENUMERATED {
```

```
fixedMACdPDU-Size,
    flexibleMACdPDU-Size
E-DCH-LogicalChannelToModify ::= SEOUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelToModifyItem
E-DCH-LogicalChannelToModifyItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator
                                                                     OPTIONAL,
    schedulingInformation
                                    SchedulingInformation
                                                                OPTIONAL,
                                    MACesGuaranteedBitRate
    mACesGuaranteedBitRate
                                                                 OPTIONAL,
    e-DCH-DDI-Value
                                    E-DCH-DDI-Value
                                                                     OPTIONAL,
    mACd-PDU-Size-List
                                    E-DCH-MACdPDU-SizeToModifyList,
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelToModifyItem-ExtIEs } }
    iE-Extensions
                                                                                                                        OPTIONAL,
E-DCH-LogicalChannelToModifyItem-ExtlEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-MaximumMACdPDU-SizeExtended
                                                                                                         PRESENCE optional },
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                MAC-PDU-SizeExtended
    . . .
E-DCH-MACdPDU-SizeToModifyList ::= SEQUENCE (SIZE (0.. maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-LogicalChannelToDelete ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelToDeleteItem
E-DCH-LogicalChannelToDeleteItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    iE-Extensions
                                    ProtocolExtensionContainer { { E-DCH-LoqicalChannelToDeleteItem-ExtIEs } }
                                                                                                                        OPTIONAL,
    . . .
E-DCH-LogicalChannelToDeleteItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
LogicalChannelID ::= INTEGER (1..15)
E-DCH-HARQ-PO-FDD ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-MACdFlow-ID ::= INTEGER (0..maxNrOfEDCHMACdFlows-1)
E-DCH-MACdFlows-Information ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-Info
                                                     E-DCH-MACdFlow-Specific-InfoList,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlows-Information-ExtIEs} } 
                                                                                                                                          OPTIONAL,
    . . .
E-DCH-MACdFlows-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
E-DCH-MACdFlow-Multiplexing-List ::= BIT STRING ( SIZE(maxNrOfEDCHMACdFlows) )
E-DCH-MACdFlow-Specific-InfoList ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem
E-DCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                  E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                  AllocationRetentionPriority,
    tnl0os
                                                  Tnl0os
                                                                                                                                     OPTIONAL,
   payloadCRC-PresenceIndicator
                                                  PayloadCRC-PresenceIndicator,
   maximum-Number-of-Retransmissions-For-E-DCH
                                                  Maximum-Number-of-Retransmissions-For-E-DCH.
    eDCH-HARO-PO-FDD
                                                  E-DCH-HARO-PO-FDD.
    eDCH-MACdFlow-Multiplexing-List
                                                  E-DCH-MACdFlow-Multiplexing-List
                                                                                                                                     OPTIONAL.
    eDCH-Grant-Type-Information
                                                  E-DCH-Grant-Type-Information,
    bundlingModeIndicator
                                                  BundlingModeIndicator
                                                                                                                   OPTIONAL,
    eDCHLogicalChannelInformation
                                                  E-DCH-LogicalChannelInformation,
    iE-Extensions
                                                  ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InfoItem-ExtIEs} }
                                                                                                                                     OPTIONAL,
    . . .
E-DCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                                                  CRITICALITY ignore EXTENSION TransportBearerNotRequestedIndicator PRESENCE optional },
    { ID id-TransportBearerNotRequestedIndicator
    . . .
E-DCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InformationResp-Item
E-DCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                  E-DCH-MACdFlow-ID,
   bindingID
                                                  BindingID
                                                                                                                                     OPTIONAL,
    transportLayerAddress
                                                  TransportLayerAddress
                                                                                                                                     OPTIONAL,
   hARQ-Process-Allocation-NonSched-2ms-EDCH
                                                  HARQ-Process-Allocation-2ms-EDCH
                                                                                                                                     OPTIONAL,
                                                  ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional }, -- FDD only
    . . .
E-DCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem-to-Modify
E-DCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE
    e-DCH-MACdFlow-ID
                                                  E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                  AllocationRetentionPriority
                                                                                                                                     OPTIONAL,
    transportBearerRequestIndicator
                                                  TransportBearerRequestIndicator,
    tnlOos
                                                  Tnl0os
                                                                                                                                     OPTIONAL,
                                                  Maximum-Number-of-Retransmissions-For-E-DCH
    maximum-Number-of-Retransmissions-For-E-DCH
                                                                                                                                     OPTIONAL,
    eDCH-HARO-PO-FDD
                                                  E-DCH-HARO-PO-FDD
                                                                                                                                     OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                                  E-DCH-MACdFlow-Multiplexing-List
                                                                                                                                     OPTIONAL,
    eDCH-Grant-Type-Information
                                                  E-DCH-Grant-Type-Information
                                                                                                                                     OPTIONAL,
```

```
bundlingModeIndicator
                                                    BundlingModeIndicator
                                                                                                                                          OPTIONAL,
    eDCH-LogicalChannelToAdd
                                                    E-DCH-LogicalChannelInformation
                                                                                                                                          OPTIONAL.
    eDCH-LogicalChannelToModify
                                                    E-DCH-LogicalChannelToModify
                                                                                                                                          OPTIONAL.
    eDCH-LogicalChannelToDelete
                                                    E-DCH-LogicalChannelToDelete
                                                                                                                                          OPTIONAL.
    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,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-to-Delete-Item-ExtIEs} }
                                                                                                                                          OPTIONAL,
    . . .
E-DCH-MACdFlow-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
E-DCH-Non-Scheduled-Transmission-Grant-Items ::= SEQUENCE
    -- The following IE shall be ignored if id-Ext-Max-Bits-MACe-PDU-non-scheduled is present in E-DCH-Non-Scheduled-Transmission-Grant-Items-
ExtIEs
                                                Max-Bits-MACe-PDU-non-scheduled,
    maxBits-MACe-PDU-non-scheduled
    hARO-Process-Allocation-NonSched-2ms
                                                HARO-Process-Allocation-2ms-EDCH
                                                                                                                                          OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs} }
   iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the maximum number of bits to be signalled exceeds maxNrOfBits-MACe-PDU-non-scheduled
    { ID id-Ext-Max-Bits-MACe-PDU-non-scheduled
                                                    CRITICALITY reject
                                                                            EXTENSION
                                                                                        Ext-Max-Bits-MACe-PDU-non-scheduled
                                                                                                                                 PRESENCE optional }.
E-DCH-Non-serving-Relative-Grant-Down-Commands ::= INTEGER (0..100,...)
E-DCHProvidedBitRateValue ::= INTEGER(0..16777215,...,16777216..256000000)
-- Unit bit/s, Range 0..2^24-1..2^24..256,000,000, Step 1 bit
Maximum-Target-ReceivedTotalWideBandPower ::= INTEGER (0..621)
-- mapping as for RTWP measurement value, as specified in [22]
Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio ::= INTEGER (0..100)
-- Unit %, Range 0..100%, Step 1%
E-DCH-RL-Indication ::= ENUMERATED {
    e-DCH,
    non-e-DCH
```

```
E-DCH-Serving-Cell-Change-Info-Response ::= SEQUENCE {
    e-DCH-serving-cell-choice
                                    E-DCH-serving-cell-choice,
                                    ProtocolExtensionContainer { { E-DCH-serving-cell-informationResponse-ExtIEs} } OPTIONAL,
    iE-Extensions
E-DCH-serving-cell-informationResponse-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-choice ::= CHOICE {
    e-DCH-serving-cell-change-successful
                                                E-DCH-serving-cell-change-successful,
    e-DCH-serving-cell-change-unsuccessful
                                                E-DCH-serving-cell-change-unsuccessful,
E-DCH-serving-cell-change-successful ::= SEQUENCE {
    e-DCH-RL-InformationList-Rsp
                                            E-DCH-RL-InformationList-Rsp,
                                        ProtocolExtensionContainer { { E-DCH-serving-cell-change-successful-ExtIEs} } OPTIONAL,
   iE-Extensions
E-DCH-RL-InformationList-Rsp ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF E-DCH-RL-InformationList-Rsp-Item
E-DCH-RL-InformationList-Rsp-Item ::= SEQUENCE {
    e-DCH-FDD-DL-Control-Channel-Info E-DCH-FDD-DL-Control-Channel-Information,
                                                    ProtocolExtensionContainer { { E-DCH-RL-InformationList-Rsp-Item-ExtIEs} } OPTIONAL,
   iE-Extensions
E-DCH-serving-cell-change-successful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-RL-InformationList-Rsp-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-change-unsuccessful ::= SEQUENCE {
    cause
                                    ProtocolExtensionContainer { { E-DCH-serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
    iE-Extensions
E-DCH-serving-cell-change-unsuccessful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
EDCH-RACH-Report-Value ::= SEQUENCE (SIZE(1.. maxNrOfCommonEDCH)) OF
    SEQUENCE {
```

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```
granted-EDCH-RACH-resources
                                    Granted-EDCH-RACH-Resources-Value,
       denied-EDCH-RACH-resources
                                    Denied-EDCH-RACH-Resources-Value,
       iE-Extensions
                         ProtocolExtensionContainer { { EDCH-RACH-Report-Value-ExtIEs } }
                                                                                      OPTIONAL.
EDCH-RACH-Report-Value-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TFCI-Table-Index ::= INTEGER (0..1,...,2..7)
E-DCH-TTI-Length ::= CHOICE {
   two-ms
              DTX-Cycle-2ms-Items,
              DTX-Cycle-10ms-Items,
   ten-ms
E-DCH-TTI-Length-to-Modify ::= CHOICE {
              DTX-Cycle-2ms-to-Modify-Items,
   two-ms
   ten-ms
              DTX-Cycle-10ms-to-Modify-Items,
   . . .
E-DPCCH-PO ::= INTEGER (0..maxNrOfEDPCCH-PO-QUANTSTEPs)
E-DPDCH-PowerInterpolation ::= BOOLEAN
E-Primary-Secondary-Grant-Selector ::= ENUMERATED {
   primary,
   secondary
E-DCH-MACdFlow-ID-LCR ::= INTEGER (0..maxNrOfEDCHMACdFlowsLCR-1)
E-DCH-MACdFlows-to-DeleteLCR ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlowsLCR)) OF E-DCH-MACdFlow-to-Delete-ItemLCR
E-DCH-MACdFlow-to-Delete-ItemLCR ::= SEQUENCE {
   e-DCH-MACdFlow-ID-LCR
                                               E-DCH-MACdFlow-ID-LCR,
                                               iE-Extensions
   OPTIONAL,
   . . .
E-DCH-MACdFlow-to-Delete-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Enhanced-UE-DRX-InformationLCR ::= SEQUENCE {
                                           T321,
   hS-DSCH-DRX-Cycle-FACH
                                           HS-DSCH-DRX-Cycle-FACH,
   hS-DSCH-RX-Burst-FACH
                                           HS-DSCH-RX-Burst-FACH,
   iE-Extensions
                                           OPTIONAL,
```

```
Enhanced-UE-DRX-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-ID-LCR ::= INTEGER(0..255)
E-HICH-Signature-Sequence ::= INTEGER (0..maxNrofSigSeqRGHI-1)
End-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    end-of-audit-sequence,
    not-end-of-audit-sequence
E-Serving-Grant-Value ::= INTEGER (0..38)
E-RGCH-2-IndexStepThreshold ::= INTEGER (0..37)
E-RGCH-3-IndexStepThreshold ::= INTEGER (0..37)
E-RGCH-E-HICH-FDD-Code-Information ::= CHOICE {
                        E-RGCH-E-HICH-FDD-Code-List,
    replace
    remove
                         NULL,
E-RGCH-E-HICH-FDD-Code-List ::= SEOUENCE (SIZE (1..maxNrOfE-RGCHs-E-HICHs)) OF FDD-DL-ChannelisationCodeNumber
E-RGCH-Release-Indicator ::= ENUMERATED {e-RGCHreleased}
E-RGCH-Signature-Sequence ::= INTEGER (0..maxNrofSiqSeqRGHI-1)
E-RNTI ::= INTEGER (0..65535)
E-TFCI ::= INTEGER (0..127)
E-TFCI-BetaEC-Boost ::= INTEGER (0..127,...)
E-TFCI-Boost-Information ::= SEQUENCE {
    e-TFCI-BetaEC-Boost
                                                 E-TFCI-BetaEC-Boost,
   uL-Delta-T2TP
                                                 UL-Delta-T2TP
                                                                        OPTIONAL,
    -- This IE shall be present if the E-TFCI BetaEC Boost IE value is not set to 127.
   iE-Extensions
                                                 OPTIONAL,
E-TFCI-Boost-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-TFCS-Information ::= SEQUENCE {
    e-DCH-TFCI-Table-Index
                                                     E-DCH-TFCI-Table-Index,
```

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E-TFCI
    e-DCH-Min-Set-E-TFCI
                                                                     OPTIONAL,
    reference-E-TFCI-Information
                                                    Reference-E-TFCI-Information,
    iE-Extensions
                                                    ProtocolExtensionContainer { {E-TFCS-Information-ExtIEs} }
                                                                                                                        OPTIONAL.
E-TFCS-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-E-TFCI-Boost-Information
                                            CRITICALITY reject
                                                                     EXTENSION E-TFCI-Boost-Information
                                                                                                                        PRESENCE optional } |
     ID id-E-DPDCH-PowerInterpolation CRITICALITY reject
                                                                 EXTENSION E-DPDCH-PowerInterpolation
                                                                                                                     PRESENCE optional },
    . . .
E-TTI ::= ENUMERATED {
    e-TTI-2ms,
    e-TTI-10ms
E-DCHProvidedBitRate ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF E-DCHProvidedBitRate-Item
E-DCHProvidedBitRate-Item ::= SEQUENCE {
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    e-DCHProvidedBitRateValue
                                        E-DCHProvidedBitRateValue,
    iE-Extensions
                                        ProtocolExtensionContainer { { E-DCHProvidedBitRate-Item-ExtIEs} }
                                                                                                                        OPTIONAL,
    . . .
E-DCHProvidedBitRate-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-RGCH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-HICH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-HICH-TimeOffset ::= INTEGER (4..44)
E-HICH-TimeOffsetLCR ::= INTEGER (4..15)
E-DCH-Information ::= SEQUENCE {
    e-PUCH-Information
                                                E-PUCH-Information,
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD,
    e-DCH-MACdFlows-Information-TDD
                                                E-DCH-MACdFlows-Information-TDD,
    e-DCH-Non-Scheduled-Grant-Info
                                                E-DCH-Non-Scheduled-Grant-Info OPTIONAL,
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e-DCH-TDD-Information
                                                E-DCH-TDD-Information,
   iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Information-ExtIEs} }
                                                                                                                        OPTIONAL,
E-DCH-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Information ::= SEQUENCE {
                                                CodeRate,
   minCR
    maxCR
                                                CodeRate,
   harqInfo
                                                HARO-Info-for-E-DCH,
   n-E-UCCH
                                                N-E-UCCH.
   iE-Extensions
                                                ProtocolExtensionContainer { { E-PUCH-Information-ExtIEs } }
                                                                                                                        OPTIONAL,
E-PUCH-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-TFCS-Information-TDD ::= SEQUENCE {
    e-DCH-OPSK-RefBetaInfo
                                                E-DCH-OPSK-RefBetaInfo,
                                                E-DCH-sixteenQAM-RefBetaInfo,
    e-DCH-sixteenQAM-RefBetaInfo
   iE-Extensions
                                                ProtocolExtensionContainer { { E-TFCS-Information-TDD-ExtIEs } }
                                                                                                                        OPTIONAL,
E-TFCS-Information-TDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-QPSK-RefBetaInfo ::= SEQUENCE (SIZE (1...maxNrOfRefBetas)) OF E-DCH-RefBeta-Item
E-DCH-sixteenQAM-RefBetaInfo ::= SEQUENCE (SIZE (1..maxNrOfRefBetas)) OF E-DCH-RefBeta-Item
E-DCH-RefBeta-Item ::= SEQUENCE {
    refCodeRate
                            CodeRate-short,
    refBeta
                            RefBeta
E-DCH-MACdFlows-Information-TDD ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-InfoTDDItem
E-DCH-MACdFlow-InfoTDDItem ::= SEOUENCE {
                                                     E-DCH-MACdFlow-ID,
    e-DCH-MACdFlow-ID
    allocationRetentionPriority
                                                     AllocationRetentionPriority,
    tnlQos
                                                     TnlQos
                                                                                 OPTIONAL,
    bindingID
                                                     BindingID
                                                                                 OPTIONAL,
                                                     TransportLayerAddress
    transportLayerAddress
                                                                                 OPTIONAL,
    payloadCRC-PresenceIndicator
                                                     PayloadCRC-PresenceIndicator,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     Maximum-Number-of-Retransmissions-For-E-DCH,
    eDCH-HARQ-PO-TDD
                                                     E-DCH-HARQ-PO-TDD,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                            OPTIONAL,
```

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eDCH-Grant-TypeTDD
                                                     E-DCH-Grant-TypeTDD,
    eDCHLogicalChannelInformation
                                                     E-DCH-LogicalChannelInformation,
    eDCH-MACdFlow-Retransmission-Timer
                                                     E-DCH-MACdFlow-Retransmission-Timer
                                                                                              OPTIONAL.
    -- Mandatory for LCR TDD, Not applicable for 3.84Mcps TDD and 7.68Mcps TDD
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlow-InfoTDDItem-ExtIEs} } }
                                                                                                                                     OPTIONAL.
E-DCH-MACdFlow-InfoTDDItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-MACdFlow-Retransmission-Timer ::= ENUMERATED {
    ms10, ms15, ms20, ms25, ms30, ms35, ms40, ms45, ms50, ms55, ms60, ms65,
   ms70, ms75, ms80, ms85, ms90, ms95, ms100, ms110, ms120, ms140, ms160,
   ms200, ms240, ms280, ms320, ms400, ms480, ms560,...
E-DCH-HARO-PO-TDD ::= INTEGER (0..6)
E-DCH-Grant-TypeTDD ::= ENUMERATED {
    scheduled,
    non-scheduled
E-DCH-Non-Scheduled-Grant-Info ::= SEQUENCE {
    timeslotResource
                                                 E-DCH-TimeslotResource.
    powerResource
                                                 E-DCH-PowerResource,
    repetitionPeriod
                                                 RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                                 TDD-ChannelisationCode,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info-ExtIEs } }
                                                                                                                              OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Grant-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TimeslotResource ::= BIT STRING (SIZE (13))
E-DCH-TimeslotResourceLCR ::= BIT STRING (SIZE (5))
E-DCH-PowerResource ::= INTEGER(1..32)
TddE-PUCH-Offset ::= INTEGER(0..255)
E-DCH-TDD-Information ::= SEOUENCE {
    e-DCH-TDD-Maximum-Bitrate
                                                     E-DCH-TDD-Maximum-Bitrate
                                                                                                                         OPTIONAL,
                                                     E-DCH-Processing-Overload-Level
    e-DCH-Processing-Overload-Level
                                                                                                                         OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                     E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                         OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-TDD-Information-ExtIEs } }
                                                                                                                         OPTIONAL,
    . . .
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E-DCH-TDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate ::= INTEGER (0..9201,...)
E-DCH-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                    E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL,
    e-AGCH-Specific-Information-ResponseTDD
                                                    E-AGCH-Specific-InformationRespListTDD OPTIONAL,
                                                    E-RNTI,
    scheduled-E-HICH-Specific-InformationResp
                                                    Scheduled-E-HICH-Specific-Information-ResponseLCRTDD
                                                                                                                     OPTIONAL, -- 1.28Mcps TDD only
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-Information-Response-ExtIEs } }
                                                                                                                             OPTIONAL.
E-DCH-Information-Response-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
Scheduled-E-HICH-Specific-Information-ResponseLCRTDD ::= SEQUENCE (SIZE (1.. maxNrOfEHICHCodes)) OF Scheduled-E-HICH-Specific-InformationItem-
ResponseLCRTDD
Scheduled-E-HICH-Specific-InformationItem-ResponseLCRTDD ::= SEQUENCE {
    eТ
                                    E-HICH-ID-TDD,
    e-HICH-ID-TDD
    iE-Extensions
                                                ProtocolExtensionContainer {{ Scheduled-E-HICH-Specific-InformationItem-ResponseLCRTDD-ExtIEs}}
    OPTIONAL,
Scheduled-E-HICH-Specific-InformationItem-ResponseLCRTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-Extended-E-HICH-ID-TDD CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD PRESENCE optional},
    -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
EI ::= INTEGER (0..3)
E-HICH-ID-TDD ::= INTEGER (0..31)
E-HICH-Type ::= ENUMERATED {scheduled, non-scheduled}
E-DCH-TDD-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-TDD-MACdFlow-Specific-InformationResp-Item
E-DCH-TDD-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE
    e-DCH-MacdFlow-Id
                                                    E-DCH-MACdFlow-ID,
    bindingID
                                                    BindingID
                                                                                OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                OPTIONAL,
                                                    ProtocolExtensionContainer { { E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    iE-Extensions
    OPTIONAL,
```

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E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Specific-InformationRespListTDD ::= SEOUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-ItemTDD
E-AGCH-Specific-InformationResp-ItemTDD ::= SEQUENCE {
    e-AGCH-Id
                                                    E-AGCH-Id,
                                                    ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs } }
    iE-Extensions
E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Id ::= INTEGER (0..31,...,32..255)
E-DCH-Information-Reconfig ::= SEQUENCE {
    e-PUCH-Information
                                                E-PUCH-Information
                                                                                                                     OPTIONAL,
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD
                                                                                                                     OPTIONAL,
                                                E-DCH-MACdFlows-Information-TDD
    e-DCH-MACdFlows-to-Add
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                E-DCH-MACdFlows-to-Delete
                                                                                                                     OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info
                                                E-DCH-Non-Scheduled-Grant-Info
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information
                                                E-DCH-TDD-Information
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                E-DCH-TDD-Information-to-Modify
                                                                                                                     OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Information-Reconfig-ExtIEs} } OPTIONAL,
E-DCH-Information-Reconfig-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Information-to-Modify ::= SEQUENCE {
    e-DCH-TDD-Information-to-Modify-List
                                            E-DCH-TDD-Information-to-Modify-List
                                                                                     OPTIONAL,
    mACeReset-Indicator
                                            MACeReset-Indicator
                                                                                     OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-TDD-Information-to-Modify-ExtIEs } }
                                                                                                                           OPTIONAL,
    . . .
E-DCH-TDD-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-MACdPDUSizeFormat
                                                        CRITICALITY reject EXTENSION E-DCH-MACdPDUSizeFormat
                                                                                                                                 PRESENCE optional },
    . . .
E-DCH-TDD-Information-to-Modify-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-ModifyTDDItem
E-DCH-MACdFlow-ModifyTDDItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     E-DCH-MACdFlow-ID,
    allocationRetentionPriority
                                                    AllocationRetentionPriority
                                                                                     OPTIONAL,
    transportBearerRequestIndicator
                                                    TransportBearerRequestIndicator,
    bindingID
                                                    BindingID
                                                                                 OPTIONAL,
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transportLayerAddress
                                                     TransportLayerAddress
                                                                                  OPTIONAL,
    tnlOos
                                                     TnlOos
                                                                                  OPTIONAL.
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     Maximum-Number-of-Retransmissions-For-E-DCH
                                                                                                                      OPTIONAL.
    eDCH-HARO-PO-TDD
                                                     E-DCH-HARO-PO-TDD
                                                                                                          OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                          OPTIONAL,
    eDCH-Grant-TypeTDD
                                                     E-DCH-Grant-TypeTDD
                                                                                                          OPTIONAL,
                                                     E-DCH-LogicalChannelInformation
    e-DCH-LogicalChannelToAdd
                                                                                                                      OPTIONAL,
    e-DCH-LogicalChannelToModify
                                                     E-DCH-LogicalChannelToModify
                                                                                                                      OPTIONAL,
    e-DCH-LogicalChannelToDelete
                                                     E-DCH-LogicalChannelToDelete
                                                                                                                      OPTIONAL,
                                                     E-DCH-MACdFlow-Retransmission-Timer
    eDCH-MACdFlow-Retransmission-Timer
                                                                                                                      OPTIONAL,
    -- LCR TDD only
                                                     ProtocolExtensionContainer { {E-DCH-MACdFlow-ModifyTDDItem-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
E-DCH-MACdFlow-ModifyTDDItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells ::= INTEGER (0..621)
-- mapping as for RTWP measurement value, as specified in [23]
E-DCH-768-Information ::= SEQUENCE {
    e-PUCH-Information
                                                 E-PUCH-Information,
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD
    e-DCH-MACdFlows-Information-TDD
                                                 E-DCH-MACdFlows-Information-TDD,
    e-DCH-Non-Scheduled-Grant-Info768
                                                 E-DCH-Non-Scheduled-Grant-Info768
                                                                                     OPTIONAL,
    e-DCH-TDD-Information768
                                                 E-DCH-TDD-Information768,
                                                 ProtocolExtensionContainer { { E-DCH-768-Information-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
E-DCH-768-Information-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-Non-Scheduled-Grant-Info768 ::= SEQUENCE {
    timeslotResource
                                                 E-DCH-TimeslotResource,
    powerResource
                                                 E-DCH-PowerResource,
    repetitionPeriod
                                                 RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode768
                                                 TDD-ChannelisationCode768
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info768-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Grant-Info768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Information768 ::= SEQUENCE {
    e-DCH-TDD-Maximum-Bitrate768
                                                     E-DCH-TDD-Maximum-Bitrate768
                                                                                                                         OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                     E-DCH-Processing-Overload-Level
                                                                                                                         OPTIONAL,
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e-DCH-PowerOffset-for-SchedulingInfo
                                                     E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                         OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-TDD-Information768-ExtIEs } }
                                                                                                                           OPTIONAL,
E-DCH-TDD-Information768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate768 ::= INTEGER (0..17713,...)
E-DCH-768-Information-Reconfig ::= SEQUENCE {
    e-PUCH-Information
                                                 E-PUCH-Information
                                                                                                                      OPTIONAL.
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD
                                                                                                                      OPTIONAL,
    e-DCH-MACdFlows-to-Add
                                                 E-DCH-MACdFlows-Information-TDD
                                                                                                                      OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                 E-DCH-MACdFlows-to-Delete
                                                                                                                      OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info768
                                                 E-DCH-Non-Scheduled-Grant-Info768
                                                                                                                         OPTIONAL,
    e-DCH-TDD-Information768
                                                 E-DCH-TDD-Information768
                                                                                                                         OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                 E-DCH-TDD-Information-to-Modify
                                                                                                                      OPTIONAL,
                                                 ProtocolExtensionContainer { { E-DCH-768-Information-Reconfig-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
E-DCH-768-Information-Reconfig-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-DCH-LCR-Information ::= SEQUENCE {
    e-PUCH-LCR-Information
                                                 E-PUCH-LCR-Information,
                                                 E-TFCS-Information-TDD,
    e-TFCS-Information-TDD
    e-DCH-MACdFlows-Information-TDD
                                                 E-DCH-MACdFlows-Information-TDD,
    e-DCH-Non-Scheduled-Grant-LCR-Info
                                                 E-DCH-Non-Scheduled-Grant-LCR-Info OPTIONAL,
    e-DCH-LCRTDD-Information
                                                 E-DCH-LCRTDD-Information,
                                                 ProtocolExtensionContainer { { E-DCH-LCR-Information-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
    . . .
E-DCH-LCR-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-PUCH-LCR-Information ::= SEQUENCE {
    minCR
                                                 CodeRate,
    maxCR
                                                 CodeRate,
    hargInfo
                                                 HARO-Info-for-E-DCH.
                                                 PRXdes-base,
    pRXdes-base
    e-PUCH-TPC-StepSize
                                                 TDD-TPC-UplinkStepSize-LCR,
    e-AGCH-TPC-StepSize
                                                 TDD-TPC-DownlinkStepSize,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-PUCH-LCR-Information-ExtIEs } }
                                                                                                                         OPTIONAL,
    . . .
E-PUCH-LCR-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-E-PUCH-PowerControlGAP
                                        CRITICALITY ignore
                                                                 EXTENSION ControlGAP
                                                                                              PRESENCE optional
```

```
E-DCH-Non-Scheduled-Grant-LCR-Info ::= SEQUENCE
    timeslotResourceLCR
                                                E-DCH-TimeslotResourceLCR.
    powerResource
                                                E-DCH-PowerResource,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    subframeNumber
                                                ENUMERATED {v0, v1},
                                                TddE-PUCH-Offset,
    tddE-PUCH-Offset
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    n-E-UCCHLCR
                                                N-E-UCCHLCR,
    e-HICH-LCR-Information
                                                E-HICH-LCR-Information,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-LCR-Info-ExtIEs } }
                                                                                                                                OPTIONAL.
E-DCH-Non-Scheduled-Grant-LCR-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
E-HICH-LCR-Information ::= SEQUENCE {
    e-HICH-ID-TDD
                                            E-HICH-ID-TDD.
    signatureSequenceGroupIndex
                                                SignatureSequenceGroupIndex.
                                                ProtocolExtensionContainer { { E-HICH-LCR-Information-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
E-HICH-LCR-Information-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-E-HICH-ID-TDD
                                        CRITICALITY ignore EXTENSION Extended-E-HICH-ID-TDD
                                                                                                 PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only when the E-HICH identity has a value larger than 31.
E-DCH-LCRTDD-Information ::= SEOUENCE {
    e-DCH-LCRTDD-PhysicalLayerCategory
                                                E-DCH-LCRTDD-PhysicalLayerCategory
                                                                                                                     OPTIONAL.
    e-DCH-Processing-Overload-Level
                                                E-DCH-Processing-Overload-Level
                                                                                                                     OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-LCRTDD-Information-ExtIEs }
    iE-Extensions
                                                                                                                       OPTIONAL,
    . . .
E-DCH-LCRTDD-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory
                                                                             CRITICALITY reject
                                                                                                                     EXTENSION Extended-E-DCH-LCRTDD-
PhysicalLaverCategory
                                PRESENCE optional }
    -- This IE shall be used if the E-DCH Physical Layer Category has a value larger than 5.
    { ID id-MaximumNumber-Of-Retransmission-for-Scheduling-Info-LCRTDD
                                                                             CRITICALITY ignore
                                                                                                                     EXTENSION Maximum-Number-of-
                                PRESENCE optional }|
Retransmissions-For-E-DCH
    { ID id-E-DCH-RetransmissionTimer-for-SchedulingInfo-LCRTDD
                                                                             CRITICALITY ignore
                                                                                                                     EXTENSION E-DCH-MACdFlow-
Retransmission-Timer
                                PRESENCE optional },
E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER(1..5)
```

```
E-DCH-LCR-Information-Reconfig ::= SEQUENCE {
    e-PUCH-LCR-Information
                                                E-PUCH-LCR-Information
                                                                                                                     OPTIONAL.
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Add
                                                E-DCH-MACdFlows-Information-TDD
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                E-DCH-MACdFlows-to-Delete
                                                                                                                     OPTIONAL,
                                                E-DCH-Non-Scheduled-Grant-LCR-Info
    e-DCH-Non-Scheduled-Grant-LCR-Info
                                                                                                                     OPTIONAL,
    e-DCH-LCRTDD-Information
                                                E-DCH-LCRTDD-Information
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                E-DCH-TDD-Information-to-Modify
                                                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-LCR-Information-Reconfig-ExtIEs} } OPTIONAL,
    iE-Extensions
E-DCH-LCR-Information-Reconfig-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Enabling-Delay ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128}
    -- Unit of radio frames
Enhanced-FACH-Capability ::= ENUMERATED {
    enhanced-FACH-capable,
    enhanced-FACH-non-capable
EnhancedHSServingCC-Abort ::= ENUMERATED {abortEnhancedHSServingCC,...}
Enhanced-PCH-Capability ::= ENUMERATED {
    enhanced-PCH-capable,
    enhanced-PCH-non-capable
Enhanced-UE-DRX-Capability ::= NULL
Enhanced-UE-DRX-InformationFDD ::= SEQUENCE {
                                                T321,
                                                HS-DSCH-DRX-Cycle-FACH,
    hS-DSCH-DRX-Cycle-FACH
    hS-DSCH-RX-Burst-FACH
                                                HS-DSCH-RX-Burst-FACH,
    dRX-Interruption-by-HS-DSCH
                                                DRX-Interruption-by-HS-DSCH,
                                                     ProtocolExtensionContainer { { Enhanced-UE-DRX-InformationFDD-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
Enhanced-UE-DRX-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Extended-E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER(6,...)
Ext-Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(19983..22978,...)
Ext-Reference-E-TFCI-PO ::= INTEGER(30..31,...)
```

```
ExtendedPropagationDelay ::= INTEGER(255..1023)
Extended-RNC-ID
                             ::= INTEGER (4096..65535)
Extended-Round-Trip-Time-Value ::= INTEGER(32767..103041)
-- See also mapping in [22]
Extended-HS-SCCH-ID
                                 ::= INTEGER (32..255)
Extended-HS-SICH-ID
                                 ::= INTEGER (32..255)
Extended-E-HICH-ID-TDD
                                  ::= INTEGER (32..255)
-- -----
-- -----
FACH-Measurement-Occasion-Cycle-Length-Coefficient ::= INTEGER (1..12)
Fast-Reconfiguration-Mode ::= ENUMERATED {fast,...}
Fast-Reconfiguration-Permission ::= ENUMERATED {allowed,...}
FDD-DL-ChannelisationCodeNumber ::= INTEGER(0.. 511)
-- According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1--
FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfCodes)) OF FDD-DL-CodeInformationItem
FDD-DL-CodeInformationItem ::= SEQUENCE {
   dl-ScramblingCode
                                          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber
                                          FDD-DL-ChannelisationCodeNumber,
    transmissionGapPatternSequenceCodeInformation
                                                     TransmissionGapPatternSequenceCodeInformation
                                                                                                                 OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs} }
                                                                                                               OPTIONAL,
FDD-DL-CodeInformationItem-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
FDD-S-CCPCH-FrameOffset ::= ENUMERATED {
   v1, v2, v4, ...
FDD-S-CCPCH-Offset ::= INTEGER (0..149)
-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --
FDD-TPC-DownlinkStepSize ::= ENUMERATED {
   step-size0-5,
   step-size1,
   step-size1-5,
   step-size2,
```

```
F-DPCH-Capability ::= ENUMERATED {
    f-DPCH-capable,
    f-DPCH-non-capable
F-DPCH-SlotFormat ::= INTEGER (0..9)
F-DPCH-SlotFormatCapability ::= ENUMERATED {
    f-DPCH-slot-format-capable,
    f-DPCH-slot-format-non-capable
FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS,
FNReportingIndicator ::= ENUMERATED {
fN-reporting-required,
fN-reporting-not-required
FrameHandlingPriority ::= INTEGER (0..15)
-- 0=lowest priority, 15=highest priority --
FrameAdjustmentValue ::= INTEGER(0..4095)
FrameOffset ::= INTEGER (0..255)
FPACH-Power ::= INTEGER (-150..400,...) -- FPACH-power = power * 10
-- If power <= -15 FPACH shall be set to -150
-- If power >= 40 FPACH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
-- -----
-- -----
GANSS-AddClockModels ::= CHOICE {
    navClockModel
                                  GANSS-NAVclockModel,
    cnavClockModel
                                  GANSS-CNAVclockModel,
    glonassClockModel
                                  GANSS-GLONASSclockModel,
    sbasClockModel
                                  GANSS-SBASclockModel,
GANSS-AddIonoModelReg ::= SEQUENCE
                  BIT STRING (SIZE(2))
                                                                               OPTIONAL.
   iE-Extensions ProtocolExtensionContainer { { GANSS-AddIonoModelReq-ExtIEs} } OPTIONAL,
```

```
GANSS-AddIonoModelReq-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AddNavigationModelsReg ::= SEQUENCE {
    ganss-Add-Nav-Models-And-Time-Recovery
                                                BOOLEAN
                                                                                                                      OPTIONAL,
   iE-Extensions
                                                ProtocolExtensionContainer { GANSS-AddNavigationModelsReq-ExtIEs} } OPTIONAL,
GANSS-AddNavigationModelsReq-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AddOrbitModels ::= CHOICE {
    navKeplerianSet
                                    GANSS-NavModel-NAVKeplerianSet,
    cnavKeplerianSet
                                   GANSS-NavModel-CNAVKeplerianSet,
    qlonassECEF
                                   GANSS-NavModel-GLONASSecef,
    sbasECEF
                                   GANSS-NavModel-SBASecef,
GANSS-AddUTCModelsReq ::= SEQUENCE
    ganss-Add-UTC-Models
                                                                                                OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { GANSS-AddUTCModelsReq-ExtIEs} } OPTIONAL,
GANSS-AddUTCModelsReg-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Additional-Ionospheric-Model ::= SEQUENCE {
                                       BIT STRING (SIZE(2)),
                                        GPS-Ionospheric-Model,
    alpha-beta-parameters
                                        ProtocolExtensionContainer { GANSS-Additional-Ionospheric-Model-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-Additional-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Additional-Navigation-Models ::= SEQUENCE {
    ganss-Transmission-Time
                               GANSS-Transmission-Time,
                                ENUMERATED { true }
    non-broadcastIndication
                                                                                                              OPTIONAL,
    ganssSatInfoNavList
                                Ganss-Sat-Info-AddNavList,
    ie-Extensions
                                ProtocolExtensionContainer { GANSS-Additional-Navigation-Models-ExtIEs } } OPTIONAL,
```

```
GANSS-Additional-Navigation-Models-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Additional-Time-Models ::= SEOUENCE (SIZE (1..maxGANSS-1)) OF GANSS-Time-Model
GANSS-Additional-UTC-Models ::= CHOICE {
   utcModel1
                      GANSS-UTCmodelSet1,
   utcModel2
                       GANSS-UTCmodelSet2,
   utcModel3
                      GANSS-UTCmodelSet3,
GANSS-Almanac ::= SEQUENCE{
   ganss-wk-number
                                      INTEGER (0..255),
   gANSS-AlmanacModel
                                      GANSS-AlmanacModel,
   ie-Extensions
                                      OPTIONAL,
GANSS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AlmanacModel ::= CHOICE {
   gANSS-keplerianParameters
                                      GANSS-KeplerianParametersAlm,
   gANSS-alm-keplerianNAVAlmanac
                                      GANSS-ALM-NAVKeplerianSet,
   gANSS-alm-keplerianReducedAlmanac
                                      GANSS-ALM-ReducedKeplerianSet,
   gANSS-alm-keplerianMidiAlmanac
                                      GANSS-ALM-MidiAlmanacSet,
   qANSS-alm-keplerianGLONASS
                                      GANSS-ALM-GlonassAlmanacSet,
    gANSS-alm-ecefSBASAlmanac
                                      GANSS-ALM-ECEFsbasAlmanacSet
GANSS-ALM-ECEFsbasAlmanacSet ::= SEQUENCE {
    sat-info-SBASecefList
                              GANSS-SAT-Info-Almanac-SBASecefList,
   ie-Extensions
                              ProtocolExtensionContainer { GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs } }
                                                                                                                  OPTIONAL,
GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-ALM-GlonassAlmanacSet ::= SEQUENCE {
    sat-info-GLOkpList
                              GANSS-SAT-Info-Almanac-GLOkpList,
    ie-Extensions
                              ProtocolExtensionContainer { GANSS-ALM-GlonassAlmanacSet-ExtIEs } }
                                                                                                                OPTIONAL,
GANSS-ALM-GlonassAlmanacSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ALM-MidiAlmanacSet ::= SEQUENCE {
                              INTEGER (0..255),
    sat-info-MIDIkpList
                              GANSS-SAT-Info-Almanac-MIDIkpList,
    ie-Extensions
                              ProtocolExtensionContainer { { GANSS-ALM-MidiAlmanacSet-ExtIEs } }
                                                                                                                OPTIONAL,
GANSS-ALM-MidiAlmanacSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ALM-NAVKeplerianSet ::= SEQUENCE {
                              INTEGER (0..255),
    sat-info-NAVkpList
                              GANSS-SAT-Info-Almanac-NAVkpList,
   ie-Extensions
                              OPTIONAL,
GANSS-ALM-NAVKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-ALM-ReducedKeplerianSet ::= SEQUENCE {
                              INTEGER (0..255),
    sat-info-REDkpList
                              GANSS-SAT-Info-Almanac-REDkpList,
                              ProtocolExtensionContainer { { GANSS-ALM-ReducedKeplerianSet-ExtIEs } }
   ie-Extensions
                                                                                                                OPTIONAL,
GANSS-ALM-ReducedKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
GANSS-Auxiliary-Information ::= CHOICE {
    qanssID1
             GANSS-AuxInfoGANSS-ID1,
                                         -- This choice may only be present if GANSS ID indicates Modernized GPS
```

```
-- This choice may only be present if GANSS ID indicates GLONASS
   qanssID3
               GANSS-AuxInfoGANSS-ID3,
GANSS-AuxInfoGANSS-ID1 ::= SEQUENCE (SIZE(1.. maxGANSSSat)) OF GANSS-AuxInfoGANSS-ID1-element
GANSS-AuxInfoGANSS-ID1-element ::= SEQUENCE {
   svID
                      INTEGER (0..63),
   signalsAvailable BIT STRING (SIZE(8)),
   ie-Extensions ProtocolExtensionContainer { { GANSS-AuxInfoGANSS-ID1-element-ExtIEs } } OPTIONAL,
GANSS-AuxInfoGANSS-ID1-element-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AuxInfoGANSS-ID3 ::= SEOUENCE (SIZE(1.. maxGANSSSat)) OF GANSS-AuxInfoGANSS-ID3-element
GANSS-AuxInfoGANSS-ID3-element ::= SEQUENCE {
                     INTEGER (0..63),
   signalsAvailable BIT STRING (SIZE(8)),
   channelNumber INTEGER (-7..13),
                      ProtocolExtensionContainer { { GANSS-AuxInfoGANSS-ID3-element-ExtIEs } } OPTIONAL,
   ie-Extensions
GANSS-AuxInfoGANSS-ID3-element-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-AuxInfoReq ::= SEQUENCE {
   ganss-Aux-Info
                                                                                     OPTIONAL,
   iE-Extensions
                           ProtocolExtensionContainer { GANSS-AuxInfoReq-ExtIEs} } OPTIONAL,
GANSS-AuxInfoReq-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Clock-Model ::= SEQUENCE (SIZE (1..maxGANSSClockMod)) OF GANSS-SatelliteClockModelItem
GANSS-CNAVclockModel ::= SEQUENCE {
                   BIT STRING (SIZE (11)),
   cnavToc
   cnavTop
                      BIT STRING (SIZE (11)),
                      BIT STRING (SIZE (5)),
   cnavURA0
   cnavURA1
                      BIT STRING (SIZE (3)),
                    BIT STRING (SIZE (3)),
   cnavURA2
   cnavAf2
                      BIT STRING (SIZE (10)),
    cnavAf1
                      BIT STRING (SIZE (20)),
    cnavAf0
                      BIT STRING (SIZE (26)),
```

```
cnavTqd
                        BIT STRING (SIZE (13)),
    cnavISCl1cp
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISCl1cd
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL.
    cnavISCl1ca
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC12c
                                                                                         OPTIONAL,
                        BIT STRING (SIZE (13))
    cnavISC15i5
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC15q5
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    ie-Extensions
                        ProtocolExtensionContainer { { GANSS-CNAVclockModel-ExtIEs } }
                                                                                         OPTIONAL,
GANSS-CNAVclockModel-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Common-Data ::= SEQUENCE {
    ganss-Ionospheric-Model
                                        GANSS-Ionospheric-Model
                                                                                                                     OPTIONAL,
    ganss-Rx-Pos
                                        GANSS-RX-Pos
                                                                                                                     OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-Common-Data-ExtIEs } }
                                                                                                                     OPTIONAL,
GANSS-Common-Data-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Additional-Ionospheric-Model
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-Ionospheric-Model
                                                                                                                        PRESENCE optional } |
    { ID id-GANSS-Earth-Orientation-Parameters
                                                     CRITICALITY ignore EXTENSION GANSS-Earth-Orientation-Parameters
                                                                                                                        PRESENCE optional },
GANSS-CommonDataInfoReq ::= SEQUENCE {
    ionospheric-Model
                                        BOOLEAN
                                                                                                                     OPTIONAL,
                                        ProtocolExtensionContainer { GANSS-CommonDataInfoReq-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
GANSS-CommonDataInfoReq-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddIonoModelReq
                                        CRITICALITY ignore EXTENSION
                                                                         GANSS-AddIonoModelReq
                                                                                                                        PRESENCE optional }
    {ID id-GANSS-EarthOrientParaReg
                                        CRITICALITY ignore EXTENSION
                                                                         GANSS-EarthOrientParaReq
                                                                                                                        PRESENCE optional } ,
GANSS-Data-Bit-Assistance ::= SEQUENCE {
    ganssTod
                                        INTEGER (0..59,...),
    dataBitAssistancelist
                                        GANSS-DataBitAssistanceList,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-ExtIEs } }
                                                                                                                     OPTIONAL,
GANSS-Data-Bit-Assistance-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-DataBitAssistanceList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF GANSS-DataBitAssistanceItem
GANSS-DataBitAssistanceItem ::= SEQUENCE {
                                    INTEGER (0..63),
    dataBitAssistanceSqnList
                                    GANSS-DataBitAssistanceSqnList,
    ie-Extensions
                                    ProtocolExtensionContainer { GANSS-DataBitAssistanceItem-ExtIEs } }
                                                                                                                    OPTIONAL,
GANSS-DataBitAssistanceItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-DataBitAssistanceSgnList ::= SEQUENCE (SIZE (1..maxSgnType)) OF GANSS-DataBitAssistanceSgnItem
GANSS-DataBitAssistanceSqnItem ::= SEQUENCE
    ganss-SignalId
                            GANSS-Signal-ID,
    ganssDataBits
                            BIT STRING (SIZE (1..1024)),
                            ProtocolExtensionContainer { { GANSS-DataBitAssistanceSqnItem-ExtIEs } }
    ie-Extensions
                                                                                                                    OPTIONAL,
GANSS-DataBitAssistanceSqnItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-ReqItem ::= SEQUENCE {
                                            INTEGER (0..86399),
    ganss-Data-Bit-Assistance-ReqList
                                            GANSS-Data-Bit-Assistance-ReqList,
                                            ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-RegItem-ExtIEs } } OPTIONAL,
    iE-Extensions
GANSS-Data-Bit-Assistance-ReqItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-RegList ::= SEQUENCE {
    dGANSS-Signal-ID
                                        BIT STRING (SIZE (8)),
    ganss-DataBitInterval
                                        INTEGER (0..15),
                                        SEQUENCE (SIZE (1..maxGANSSSat)) OF INTEGER(0..63)
                                                                                                                          OPTIONAL,
    ganss-SatelliteInfo
                                        ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-ReqList-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
GANSS-Data-Bit-Assistance-ReqList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-DeltaUT1 ::= SEQUENCE {
   b1
                       BIT STRING (SIZE(11)),
   b2
                       BIT STRING (SIZE(10)),
    ie-Extensions
                       ProtocolExtensionContainer { { GANSS-DeltaUT1-ExtIEs } }
                                                                                    OPTIONAL,
GANSS-DeltaUT1-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Earth-Orientation-Parameters ::= SEQUENCE {
                       BIT STRING (SIZE (16)),
    рmХ
                       BIT STRING (SIZE (21)),
    pmXdot
                     BIT STRING (SIZE (15)),
   pmY
                       BIT STRING (SIZE (21)),
    pmYdot
                       BIT STRING (SIZE (15)),
    deltaUT1
                       BIT STRING (SIZE (31)),
    deltaUT1dot
                       BIT STRING (SIZE (19)),
                       ProtocolExtensionContainer { { GANSS-Earth-Orientation-Parameters-ExtIEs } }
    ie-Extensions
                                                                                                                    OPTIONAL,
GANSS-Earth-Orientation-Parameters-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
GANSS-EarthOrientParaReq ::= SEQUENCE {
    eopRea
                    BOOLEAN
                                                                                        OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { GANSS-EarthOrientParaReq-ExtIEs} }
                                                                                        OPTIONAL,
GANSS-EarthOrientParaReq-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-GenericDataInfoReqList ::= SEQUENCE (SIZE(1..maxNoGANSS)) OF GANSS-GenericDataInfoReqItem
GANSS-GenericDataInfoReqItem ::= SEQUENCE {
    ganss-Id
                                                GANSS-ID
                                                                                                                          OPTIONAL,
    ganss-Navigation-Model-And-Time-Recovery
                                                                                                                          OPTIONAL,
                                                BOOLEAN
    ganss-Time-Model-GNSS-GNSS
                                                BIT STRING (SIZE (9))
                                                                                                                          OPTIONAL,
    ganss-UTC-Model
                                                BOOLEAN
                                                                                                                          OPTIONAL,
    ganss-Almanac
                                                BOOLEAN
                                                                                                                          OPTIONAL,
    ganss-Real-Time-Integrity
                                                BOOLEAN
                                                                                                                          OPTIONAL,
    ganss-Data-Bit-Assistance-Reg
                                                GANSS-Data-Bit-Assistance-RegItem
                                                                                                                          OPTIONAL,
    ie-Extensions
                                                ProtocolExtensionContainer { GANSS-GenericDataInfoReqItem-ExtIEs } }
                                                                                                                          OPTIONAL,
GANSS-GenericDataInfoReqItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddNavigationModelsReq CRITICALITY ignore EXTENSION
                                                                        GANSS-AddNavigationModelsReg
                                                                                                                    PRESENCE optional }
```

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```
{ID id-GANSS-AddUTCModelsReg
                                                                         GANSS-AddUTCModelsReg
                                                                                                                     PRESENCE optional }
                                        CRITICALITY ignore EXTENSION
                                                                                                                     PRESENCE optional }
    {ID id-GANSS-AuxInfoReq
                                        CRITICALITY ignore EXTENSION
                                                                         GANSS-AuxInfoReq
    {ID id-GANSS-SBAS-ID
                                                                                                                     PRESENCE optional } ,
                                        CRITICALITY ignore EXTENSION
                                                                         GANSS-SBAS-ID
GANSS-Generic-Data ::= SEQUENCE (SIZE(1..maxNoGANSS)) OF GANSS-Generic-DataItem
GANSS-Generic-DataItem ::= SEQUENCE {
                                                GANSS-ID
                                                                                                                           OPTIONAL,
    ganss-Id
    dganss-Correction
                                                DGANSSCorrections
                                                                                                                           OPTIONAL,
    ganss-Navigation-Model-And-Time-Recovery
                                                GANSS-Navigation-Model-And-Time-Recovery
                                                                                                                           OPTIONAL,
    ganss-Time-Model
                                                GANSS-Time-Model
                                                                                                                           OPTIONAL,
    ganss-UTC-TIME
                                                GANSS-UTC-Model
                                                                                                                           OPTIONAL,
    ganss-Almanac
                                                GANSS-Almanac
                                                                                                                           OPTIONAL,
    ganss-Real-Time-Integrity
                                                GANSS-Real-Time-Integrity
                                                                                                                           OPTIONAL,
    ganss-Data-Bit-Assistance
                                                GANSS-Data-Bit-Assistance
                                                                                                                           OPTIONAL,
    ie-Extensions
                                                ProtocolExtensionContainer { {
                                                                                GANSS-Generic-DataItem-ExtIEs } }
                                                                                                                           OPTIONAL,
GANSS-Generic-DataItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
      ID id-GANSS-Additional-Time-Models
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-Time-Models
                                                                                                                        PRESENCE optional }
      ID id-GANSS-Additional-Navigation-Models
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-Navigation-Models
                                                                                                                        PRESENCE optional
      ID id-GANSS-Additional-UTC-Models
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-UTC-Models
                                                                                                                        PRESENCE optional
      ID id-GANSS-Auxiliary-Information
                                                     CRITICALITY ignore EXTENSION GANSS-Auxiliary-Information
                                                                                                                        PRESENCE optional }
     ID id-GANSS-SBAS-ID
                                                     CRITICALITY ignore EXTENSION GANSS-SBAS-ID
                                                                                                                        PRESENCE optional },
GANSS-GLONASSclockModel ::= SEQUENCE
    qloTau
                            BIT STRING (SIZE (22)),
    qloGamma
                            BIT STRING (SIZE (11)),
    qloDeltaTau
                            BIT STRING (SIZE (5))
                                                                                                 OPTIONAL,
                            ProtocolExtensionContainer { { GANSS-GLONASSclockModel-ExtIEs } }
    ie-Extensions
                                                                                                 OPTIONAL,
GANSS-GLONASSclockModel-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
GANSS-ID ::= INTEGER(0..7,...)
GANSS-Information ::= SEQUENCE
    gANSS-CommonDataInfoReq
                                        GANSS-CommonDataInfoReq
                                                                                                                     OPTIONAL,
    gANSS-GenericDataInfoReqList
                                        GANSS-GenericDataInfoReqList
                                                                                                                     OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-Information-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
```

```
GANSS-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos
                                        BIT STRING (SIZE (12)),
    alpha-one-ionos
                                        BIT STRING (SIZE (12)),
    alpha-two-ionos
                                        BIT STRING (SIZE (12)),
    gANSS-IonosphereRegionalStormFlags GANSS-IonosphereRegionalStormFlags
                                                                                                                     OPTIONAL,
                                        ProtocolExtensionContainer { { GANSS-Ionospheric-Model-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
GANSS-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-IonosphereRegionalStormFlags ::= SEQUENCE
    storm-flag-one
                                        BOOLEAN,
    storm-flag-two
                                        BOOLEAN,
    storm-flag-three
                                        BOOLEAN,
    storm-flag-four
                                        BOOLEAN,
    storm-flag-five
                                        BOOLEAN,
                                        ProtocolExtensionContainer { { GANSS-IonosphereRegionalStormFlags-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-IonosphereRegionalStormFlags-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-KeplerianParametersAlm ::= SEQUENCE {
    t-oa
                                        INTEGER (0..255),
                                        INTEGER(0..3),
    gANSS-SatelliteInformationKP
                                        GANSS-SatelliteInformationKP,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-KeplerianParametersAlm-ExtIEs } }
                                                                                                                        OPTIONAL,
    . . .
GANSS-KeplerianParametersAlm-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-KeplerianParametersOrb ::= SEQUENCE {
    toe-nav
                                        BIT STRING (SIZE (14)),
    ganss-omega-nav
                                        BIT STRING (SIZE (32)),
    delta-n-nav
                                        BIT STRING (SIZE (16)),
```

```
m-zero-nav
                                        BIT STRING (SIZE (32)),
    omegadot-nav
                                        BIT STRING (SIZE (24)),
    ganss-e-nav
                                        BIT STRING (SIZE (32)),
    idot-nav
                                        BIT STRING (SIZE (14)),
                                        BIT STRING (SIZE (32)),
    a-sgrt-nav
    i-zero-nav
                                        BIT STRING (SIZE (32)),
    omega-zero-nav
                                        BIT STRING (SIZE (32)),
    c-rs-nav
                                        BIT STRING (SIZE (16)),
    c-is-nav
                                        BIT STRING (SIZE (16)),
    c-us-nav
                                        BIT STRING (SIZE (16)),
                                        BIT STRING (SIZE (16)),
    c-rc-nav
    c-ic-nav
                                        BIT STRING (SIZE (16)),
                                        BIT STRING (SIZE (16)),
    c-uc-nav
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-KeplerianParametersOrb-ExtIEs } }
                                                                                                                        OPTIONAL,
    . . .
GANSS-KeplerianParametersOrb-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-NAVclockModel ::= SEQUENCE {
    navToc
                           BIT STRING (SIZE (16)),
   navaf2
                           BIT STRING (SIZE (8)),
                         BIT STRING (SIZE (16)),
   navaf1
   navaf0
                           BIT STRING (SIZE (22)),
   navTqd
                           BIT STRING (SIZE (8)),
                           ProtocolExtensionContainer { { GANSS-NAVclockModel-ExtIEs } }
    ie-Extensions
                                                                                             OPTIONAL.
GANSS-NAVclockModel-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Navigation-Model-And-Time-Recovery ::= SEQUENCE {
    ganss-Transmission-Time
                                GANSS-Transmission-Time,
    non-broadcastIndication
                                ENUMERATED { true }
                                                        OPTIONAL,
    ganssSatInfoNav
                                GANSS-Sat-Info-Nav,
                                ProtocolExtensionContainer { GANSS-Navigation-Model-And-Time-Recovery-ExtIEs } } OPTIONAL,
    ie-Extensions
    . . .
GANSS-Navigation-Model-And-Time-Recovery-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-CNAVKeplerianSet ::= SEQUENCE {
```

```
        cnavTop
        BIT STRING (SIZE (11)),

        cnavURAindex
        BIT STRING (SIZE (5)),

        cnavDeltaA
        BIT STRING (SIZE (26)),

        cnavAdot
        BIT STRING (SIZE (25)),

        cnavDeltaNo
        BIT STRING (SIZE (25)),

        cnavDeltaNoDot
        BIT STRING (SIZE (23)),

        cnavMo
        BIT STRING (SIZE (33)),

        cnavMe
        BIT STRING (SIZE (33)),

        cnavOmega
        BIT STRING (SIZE (33)),

        cnavOMEGAO
        BIT STRING (SIZE (33)),

        cnavDeltaOmegaDot
        BIT STRING (SIZE (17)),

        cnavIo
        BIT STRING (SIZE (15)),

        cnavCis
        BIT STRING (SIZE (16)),

        cnavCic
        BIT STRING (SIZE (16)),

        cnavCrs
        BIT STRING (SIZE (24)),

        cnavCuc
        BIT STRING (SIZE (21)),

        ie-Extensions
        ProtocolExtensionContain

                                                                       BIT STRING (SIZE (11)),
                                                                 ProtocolExtensionContainer { GANSS-NavModel-CNAVKeplerianSet-ExtIEs } }
          ie-Extensions
                                                                                                                                                                                                                                                                                                               OPTIONAL,
GANSS-NavModel-CNAVKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-GLONASSecef ::= SEQUENCE {
                             BIT STRING (SIZE (5)),
BIT STRING (SIZE(2)),
BIT STRING (SIZE(2)),
BIT STRING (SIZE(2)),
BIT STRING (SIZE(2))
BIT STRING (SIZE(2)),
BIT STRING (SIZE(27)),
BIT STRING (SIZE(24)),
dot
BIT STRING (SIZE(5)),
BIT STRING (SIZE(27)),
          gloEn
          qloP1
          qloP2
          qloM
                                                                                                                                                                                                                                                                                                              OPTIONAL,
          qloX
          aloXdot
          gloXdotdot
          qloY
                                                           BIT STRING (SIZE (24)),
BIT STRING (SIZE (5)),
BIT STRING (SIZE (5)),
BIT STRING (SIZE (27)),
BIT STRING (SIZE (24)),
          gloYdot
          gloYdotdot
          qloZ
          qloZdot
          gloZdotdot
                                                                   BIT STRING (SIZE (5)),
          ie-Extensions
                                                                       ProtocolExtensionContainer { { GANSS-NavModel-GLONASSecef-ExtIEs } }
                                                                                                                                                                                                                                                                                                               OPTIONAL,
GANSS-NavModel-GLONASSecef-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-NAVKeplerianSet ::= SEQUENCE {
          navURA
                                                                BIT STRING (SIZE (4)),
          navFitFlaq
                                                                       BIT STRING (SIZE (1)),
```

```
navToe
                                            BIT STRING (SIZE (16)),
      navOmega
                                         BIT STRING (SIZE (32)),
                                       BIT STRING (SIZE (16)),
BIT STRING (SIZE (32)),
      navDeltaN
      navM0
      navOmegaADot BIT STRING (SIZE (24)),
navE BIT STRING (SIZE (32)),
                                    BIT STRING (SIZE (14)),
BIT STRING (SIZE (32)),
      navIDot
      navAPowerHalf
      navI0
                                            BIT STRING (SIZE (32)),
                              BIT STRING (SIZE (32)),
BIT STRING (SIZE (16)),
      navOmegaA0
      navCrs
      navCis
      navCus
      navCrc
      navCic
      navCuc
                                            ProtocolExtensionContainer { GANSS-NavModel-NAVKeplerianSet-ExtIEs } }
      ie-Extensions
                                                                                                                                                                                            OPTIONAL,
GANSS-NavModel-NAVKeplerianSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-SBASecef ::= SEQUENCE {
      sbasTo
                     BIT STRING (SIZE (13))
                                                                                                                                                            OPTIONAL,
     sbasTo BIT STRING (SIZE (13))
sbasAccuracy BIT STRING (SIZE (4)),
sbasXg BIT STRING (SIZE (30)),
sbasYg BIT STRING (SIZE (30)),
sbasZg BIT STRING (SIZE (25)),
sbasXgDot BIT STRING (SIZE (25)),
sbasYgDot BIT STRING (SIZE (17)),
sbasZgDot BIT STRING (SIZE (17)),
sbasZgDot BIT STRING (SIZE (18)),
sbasXgDotDot BIT STRING (SIZE (10)),
sbasZgDotDot BIT STRING (SIZE (10)),
sbasZgDotDot BIT STRING (SIZE (10)),
sbasZgDotDot BIT STRING (SIZE (10)),
                                            ProtocolExtensionContainer { GANSS-NavModel-SBASecef-ExtIEs } }
                                                                                                                                                           OPTIONAL,
      ie-Extensions
GANSS-NavModel-SBASecef-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Orbit-Model ::= CHOICE {
      gANSS-keplerianParameters
                                                                GANSS-KeplerianParametersOrb,
      . . .
GANSS-Real-Time-Integrity ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF GANSS-RealTimeInformationItem
```

```
GANSS-RealTimeInformationItem ::= SEQUENCE {
   bad-ganss-satId
                                      INTEGER (0..63),
   bad-ganss-signalId
                                      BIT STRING(SIZE(8))
                                                                                                               OPTIONAL,
   ie-Extensions
                                      OPTIONAL,
GANSS-RealTimeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-RX-Pos ::= SEQUENCE {
   latitudeSign
                                      ENUMERATED{north, south},
   degreesOfLatitude
                                      INTEGER (0..2147483647),
   degreesOfLongitude
                                      INTEGER (-2147483648..2147483647),
   directionOfAltitude
                                      ENUMERATED{height,depth},
   altitude
                                      INTEGER (0..32767),
   ie-Extensions
                                      ProtocolExtensionContainer { GANSS-RX-Pos-ExtIEs } } OPTIONAL,
GANSS-RX-Pos-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SatelliteClockModelItem ::= SEQUENCE {
   t-oc
                                      BIT STRING (SIZE (14)),
   a-i2
                                      BIT STRING (SIZE (12)),
   a-i1
                                      BIT STRING (SIZE (18)),
   a-i0
                                      BIT STRING (SIZE (28)),
   t-qd
                                      BIT STRING (SIZE (10))
                                                                                                               OPTIONAL,
   model-id
                                      INTEGER (0..1,...)
                                                                                                               OPTIONAL,
   ie-Extensions
                                      ProtocolExtensionContainer { { GANSS-SatelliteClockModelItem-ExtIEs } }
                                                                                                               OPTIONAL,
GANSS-SatelliteClockModelItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SatelliteInformationKP ::= SEQUENCE (SIZE (1..maxGANSSSatAlmanac)) OF GANSS-SatelliteInformationKPItem
GANSS-SatelliteInformationKPItem ::= SEOUENCE {
   satId
                                      INTEGER (0..63),
   ganss-e-alm
                                      BIT STRING (SIZE (11)),
```

```
ganss-delta-I-alm
                                        BIT STRING (SIZE (11)),
    ganss-omegadot-alm
                                        BIT STRING (SIZE (11)),
    ganss-svhealth-alm
                                        BIT STRING (SIZE (4)),
    ganss-delta-a-sgrt-alm
                                        BIT STRING (SIZE (17)),
    ganss-omegazero-alm
                                        BIT STRING (SIZE (16)),
    ganss-m-zero-alm
                                        BIT STRING (SIZE (16)),
    ganss-omega-alm
                                        BIT STRING (SIZE (16)),
    ganss-af-zero-alm
                                        BIT STRING (SIZE (14)),
    ganss-af-one-alm
                                        BIT STRING (SIZE (11)),
                                        ProtocolExtensionContainer { { GANSS-SatelliteInformationKPItem-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-SatelliteInformationKPItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Ganss-Sat-Info-AddNavList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
    satId
                                INTEGER (0..63),
    svHealth
                                BIT STRING (SIZE (6)),
    iod
                                BIT STRING (SIZE (11)),
    ganssAddClockModels
                                GANSS-AddClockModels,
    ganssAddOrbitModels
                                GANSS-AddOrbitModels,
    ie-Extensions
                                ProtocolExtensionContainer { { Ganss-Sat-Info-AddNavList-ExtIEs } } OPTIONAL,
Ganss-Sat-Info-AddNavList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-GLOkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-GLOkp
GANSS-SAT-Info-Almanac-GLOkp ::= SEQUENCE {
                           BIT STRING (SIZE(11)),
    qloAlmNA
    gloAlmnA
                           BIT STRING (SIZE(5)),
    gloAlmHA
                           BIT STRING (SIZE(5)),
    gloAlmLambdaA
                           BIT STRING (SIZE(21)),
    gloAlmTlambdaA
                           BIT STRING (SIZE(21)),
    gloAlmDeltaIA
                           BIT STRING (SIZE(18)),
    qloAkmDeltaTA
                           BIT STRING (SIZE(22)),
    qloAlmDeltaTdotA
                           BIT STRING (SIZE(7)),
    gloAlmEpsilonA
                           BIT STRING (SIZE(15)),
    qloAlmOmeqaA
                            BIT STRING (SIZE(16)),
    qloAlmTauA
                           BIT STRING (SIZE(10)),
    gloAlmCA
                            BIT STRING (SIZE(1)),
    gloAlmMA
                            BIT STRING (SIZE(2))
                                                                                                                    OPTIONAL,
    ie-Extensions
                            ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-GLOkp-ExtIEs } }
                                                                                                                    OPTIONAL,
```

```
GANSS-SAT-Info-Almanac-GLOkp-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-MIDIkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-MIDIkp
GANSS-SAT-Info-Almanac-MIDIkp ::= SEQUENCE {
     svID
               INTEGER(0..63),
     midiAlmE
                                  BIT STRING (SIZE (11)),
    midialme BIT STRING (SIZE (11)),
midialmDeltaI BIT STRING (SIZE (11)),
midialmOmegaDot BIT STRING (SIZE (11)),
midialmSqrtA BIT STRING (SIZE (17)),
midialmOmega0 BIT STRING (SIZE (16)),
midialmOmega BIT STRING (SIZE (16)),
     midiAlmMo
                                 BIT STRING (SIZE (16)),

        midiAlmaf0
        BIT STRING (SIZE (10)),

        midiAlmaf0
        BIT STRING (SIZE (11)),

        midiAlmaf1
        BIT STRING (SIZE (10)),

        midiAlmL1Health
        BIT STRING (SIZE (1)),

        midiAlmL2Health
        BIT STRING (SIZE (1)),

        midiAlmL5Health
        BIT STRING (SIZE (1)),

                                     ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-MIDIkp-ExtIEs } }
     ie-Extensions
                                                                                                                                                            OPTIONAL,
GANSS-SAT-Info-Almanac-MIDIkp-ExtIES NBAP-PROTOCOL-EXTENSION ::=
GANSS-SAT-Info-Almanac-NAVkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-NAVkp
GANSS-SAT-Info-Almanac-NAVkp ::= SEQUENCE {
     svID
                  INTEGER (0..63),
                           BIT STRING (SIZE (16)),
BIT STRING (SIZE (16)),
     navAlmE
     navAlmDeltaI
     navAlmOMEGADOT
                                  BIT STRING (SIZE (16)),
     navAlmSVHealth
                                 BIT STRING (SIZE (8)),
     navAlmSgrtA
                                 BIT STRING (SIZE (24)),
     navAlmOMEGAo
                                  BIT STRING (SIZE (24)),
     navAlmOmega
                                 BIT STRING (SIZE (24)),
     navAlmMo
                                  BIT STRING (SIZE (24)),
                                 BIT STRING (SIZE (11)),
     navAlmaf0
     navAlmaf1
                                    BIT STRING (SIZE (11)),
     ie-Extensions
                                     ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-NAVkp-ExtIEs } }
                                                                                                                                                            OPTIONAL,
GANSS-SAT-Info-Almanac-NAVkp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-SAT-Info-Almanac-REDkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-REDkp
GANSS-SAT-Info-Almanac-REDkp ::= SEQUENCE {
    svID
                               INTEGER (0..63),
   redAlmDeltaA BIT STRING (SIZE (8)),
redAlmOmega0 BIT STRING (SIZE (7)),
redAlmPhi0 BIT STRING (SIZE (7)),
redAlmL1Health BIT STRING (SIZE (1)),
redAlmL2Health BIT STRING (SIZE (1)),
redAlmL5Health BIT STRING (SIZE (1)),
                       ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-REDkp-ExtIEs } }
    ie-Extensions
                                                                                                                                     OPTIONAL,
GANSS-SAT-Info-Almanac-REDkp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-SBASecefList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF GANSS-SAT-Info-Almanac-SBASecef
GANSS-SAT-Info-Almanac-SBASecef ::= SEQUENCE {
    sbasAlmDataID BIT STRING (SIZE(2)),
    svID
                             INTEGER (0..63),
                          BIT STRING (SIZE(8)),
BIT STRING (SIZE(15)),
    sbasAlmHealth
    sbasAlmXq
                            BIT STRING (SIZE(15)),
    sbasAlmYq
                         BIT STRING (SIZE(9)),
BIT STRING (SIZE(3)),
BIT STRING (SIZE(3)),
    sbasAlmZq
    sbasAlmXqdot
    sbasAlmYqDot
                           BIT STRING (SIZE(4)),
    sbasAlmZqDot
    sbasAlmTo
                               BIT STRING (SIZE(11)),
    ie-Extensions
                               ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-SBASecef-ExtIEs } }
                                                                                                                                     OPTIONAL,
GANSS-SAT-Info-Almanac-SBASecef-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Sat-Info-Nav ::= SEQUENCE (SIZE(1..maxGANSSSat)) OF SEQUENCE {
    satId
                                   INTEGER (0..63),
    svHealth
                                    BIT STRING (SIZE(5)),
                                    BIT STRING (SIZE(10)),
    ganssClockModel
                                    GANSS-Clock-Model,
    ganssOrbitModel
                                    GANSS-Orbit-Model,
                                    ProtocolExtensionContainer { GANSS-Sat-Info-Nav-ExtIEs } } OPTIONAL,
    ie-Extensions
```

```
GANSS-Sat-Info-Nav-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-SBAS-ID ::= ENUMERATED
                                waas,
                                egnos,
                                msas,
                                gagan,
GANSS-SBASclockModel ::= SEQUENCE {
    sbasTo
                            BIT STRING (SIZE (13)),
    sbasAqfo
                            BIT STRING (SIZE (12)),
    sbasAqf1
                            BIT STRING (SIZE (8)),
    ie-Extensions
                            ProtocolExtensionContainer { GANSS-SBASclockModel-ExtIEs } } OPTIONAL,
GANSS-SBASclockModel-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Signal-ID ::= INTEGER(0..7,...)
GANSS-StatusHealth ::= ENUMERATED {
  udre-scale-1dot0,
  udre-scale-0dot75,
  udre-scale-0dot5,
  udre-scale-0dot3,
  udre-scale-0dot2,
  udre-scale-0dot1,
  no-data,
   invalid-data
GANSS-Time-ID ::= INTEGER(0..7,...)
GANSS-Time-Model ::= SEQUENCE {
    ganss-time-model-Ref-Time
                                        INTEGER (0..37799),
    ganss-t-a0
                                        INTEGER (-2147483648.. 2147483647),
                                        INTEGER (-8388608.. 8388607)
    ganss-t-a1
                                                                                                                      OPTIONAL,
    qanss-t-a2
                                        INTEGER (-64..63)
                                                                                                                      OPTIONAL,
                                        ENUMERATED{gps,...,galileo,qzss,glonass},
    qnss-to-id
    ganss-wk-number
                                        INTEGER (0..8191)
                                                                                                                      OPTIONAL,
```

```
ie-Extensions
                                                                                                         OPTIONAL,
GANSS-Time-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-Transmission-Time ::= SEQUENCE {
                             INTEGER (0..8191)
   ganssDay
                                                                                                        OPTIONAL,
   ganssTod
                            INTEGER (0..86399),
   ie-Extensions
                            ProtocolExtensionContainer { GANSS-Transmission-Time-ExtIEs } }
                                                                                                        OPTIONAL,
GANSS-Transmission-Time-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-UTC-Model ::= SEQUENCE {
   a-one-utc
                                    BIT STRING (SIZE (24)),
   a-zero-utc
                                    BIT STRING (SIZE (32)),
                                    BIT STRING (SIZE (8)),
   t-ot-utc
   w-n-t-utc
                                    BIT STRING (SIZE (8)),
   delta-t-ls-utc
                                    BIT STRING (SIZE (8)),
   w-n-lsf-utc
                                    BIT STRING (SIZE (8)),
   dn-utc
                                    BIT STRING (SIZE (8)),
   delta-t-lsf-utc
                                    BIT STRING (SIZE (8)),
   ie-Extensions
                                    ProtocolExtensionContainer { { GANSS-UTC-Model-ExtIEs } }
                                                                                                         OPTIONAL,
GANSS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet1 ::= SEQUENCE {
   utcA0
                     BIT STRING (SIZE(16)),
   utcA1
                     BIT STRING (SIZE(13)),
   utcA2
                     BIT STRING (SIZE(7)),
                     BIT STRING (SIZE(8)),
   utcDeltaTls
   utcTot
                     BIT STRING (SIZE(16)),
                     BIT STRING (SIZE(13)),
   utcWNot
   utcWNlsf
                     BIT STRING (SIZE(8)),
   utcDN
                     BIT STRING (SIZE(4)),
   utcDeltaTlsf
                     BIT STRING (SIZE(8)),
   ie-Extensions
                     . . .
```

```
GANSS-UTCmodelSet1-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet2 ::= SEQUENCE {
                      BIT STRING (SIZE(11)),
    tauC
                      BIT STRING (SIZE(32)),
    deltaUT1
                     GANSS-DeltaUT1
                                                                                   OPTIONAL,
                      BIT STRING (SIZE(2))
                                                                                   OPTIONAL,
                      ProtocolExtensionContainer { GANSS-UTCmodelSet2-ExtIEs } }
    ie-Extensions
                                                                                   OPTIONAL,
GANSS-UTCmodelSet2-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet3 ::= SEQUENCE {
    utcA1wnt
                      BIT STRING (SIZE(24)),
   utcA0wnt
                      BIT STRING (SIZE(32)),
                      BIT STRING (SIZE(8)),
   utcTot
   utcWNt
                      BIT STRING (SIZE(8)),
    utcDeltaTls
                      BIT STRING (SIZE(8)),
    utcWNlsf
                      BIT STRING (SIZE(8)),
    utcDN
                      BIT STRING (SIZE(8)),
    utcDeltaTlsf
                    BIT STRING (SIZE(8)),
    utcStandardID
                      BIT STRING (SIZE(3)),
    ie-Extensions
                      OPTIONAL,
GANSS-UTCmodelSet3-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GapLength
                      ::= INTEGER (1..14)
-- Unit slot
GapDuration
                      ::= INTEGER (1..144,...)
-- Unit frame
GenericTrafficCategory ::= BIT STRING (SIZE (8))
GPS-Almanac ::= SEQUENCE {
                       BIT STRING (SIZE (8)),
    wna-alm
   sat-info-almanac
                       SAT-Info-Almanac,
    sVGlobalHealth-alm BIT STRING (SIZE (364)) OPTIONAL,
                       ProtocolExtensionContainer { { GPS-Almanac-ExtIEs} }
    ie-Extensions
                                                                               OPTIONAL,
```

```
GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   EXTENSION SAT-Info-Almanac-ExtList
                                                                                               PRESENCE optional },
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)),
                      ProtocolExtensionContainer { { GPS-Ionospheric-Model-ExtIEs} }
  ie-Extensions
                                                                                  OPTIONAL,
GPS-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-Information ::= SEQUENCE (SIZE (0..maxNoGPSItems)) OF GPS-Information-Item
-- This IE shall be present if the Information Type Item IE indicates "GPS Information"
GPS-Information-Item ::= ENUMERATED {
  gps-navigation-model-and-time-recovery,
  qps-ionospheric-model,
  qps-utc-model,
  qps-almanac,
  qps-rt-integrity,
GPS-RealTime-Integrity ::= CHOICE {
   bad-satellites
                            GPSBadSat-Info-RealTime-Integrity,
   no-bad-satellites
                            NULL
GPSBadSat-Info-RealTime-Integrity ::= SEQUENCE {
   sat-info
                                SATInfo-RealTime-Integrity,
   ie-Extensions
                                OPTIONAL,
```

```
GPSBadSat-Info-RealTime-Integrity-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF GPS-NavandRecovery-Item
GPS-NavandRecovery-Item ::= SEQUENCE {
  tx-tow-nav
                                   INTEGER (0..1048575),
  sat-id-nav
                                   SAT-ID,
  tlm-message-nav
                                   BIT STRING (SIZE (14)),
  tlm-revd-c-nav
                                  BIT STRING (SIZE (2)),
 ho-word-nav
                                  BIT STRING (SIZE (22)),
 w-n-nav
                                  BIT STRING (SIZE (10)),
                                  BIT STRING (SIZE (2)),
  ca-or-p-on-12-nav
 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)),
  sf1-reserved-nav
                                  BIT STRING (SIZE (87)),
  t-qd-nav
                                  BIT STRING (SIZE (8)),
  t-oc-nav
                                  BIT STRING (SIZE (16)),
  a-f-2-nav
                                  BIT STRING (SIZE (8)),
  a-f-1-nav
                                   BIT STRING (SIZE (16)),
 a-f-zero-nav
                                  BIT STRING (SIZE (22)),
 c-rs-nav
                                  BIT STRING (SIZE (16)),
 delta-n-nav
                                  BIT STRING (SIZE (16)),
 m-zero-nav
                                  BIT STRING (SIZE (32)),
  c-uc-nav
                                  BIT STRING (SIZE (16)),
  gps-e-nav
                                  BIT STRING (SIZE (32)),
  c-us-nav
                                  BIT STRING (SIZE (16)),
  a-sqrt-nav
                                  BIT STRING (SIZE (32)),
  t-oe-nav
                                  BIT STRING (SIZE (16)),
  fit-interval-flag-nav
                                   BIT STRING (SIZE (1)),
  aodo-nav
                                   BIT STRING (SIZE (5)),
  c-ic-nav
                                   BIT STRING (SIZE (16)),
                                   BIT STRING (SIZE (32)),
  omega-zero-nav
 c-is-nav
                                   BIT STRING (SIZE (16)),
                                  BIT STRING (SIZE (32)),
 i-zero-nav
 c-rc-nav
                                  BIT STRING (SIZE (16)),
 qps-omega-nav
                                  BIT STRING (SIZE (32)),
  omegadot-nav
                                  BIT STRING (SIZE (24)),
 idot-nav
                                  BIT STRING (SIZE (14)),
  spare-zero-fill
                                   BIT STRING (SIZE (20)),
  ie-Extensions
                                   ProtocolExtensionContainer { { GPS-NavandRecovery-Item-ExtIEs} }
                                                                                                                       OPTIONAL,
GPS-NavandRecovery-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
GPS-RX-POS ::= SEQUENCE {
   latitudeSign
                         ENUMERATED {north, south},
                         INTEGER (0..8388607),
   latitude
   longitude
                         INTEGER (-8388608..8388607),
   directionOfAltitude
                         ENUMERATED {height, depth},
   altitude
                         INTEGER (0..32767),
                         ProtocolExtensionContainer { GPS-RX-POS-ExtIEs} } OPTIONAL,
   iE-Extensions
GPS-RX-POS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-Status-Health ::= ENUMERATED {
  udre-scale-1dot0,
  udre-scale-0dot75,
  udre-scale-0dot5,
  udre-scale-0dot3,
  udre-scale-0dot1,
  no-data,
  invalid-data
GPSTOW ::= INTEGER (0..604799)
GPS-UTC-Model ::= SEQUENCE {
  a-one-utc
                      BIT STRING (SIZE (24)),
  a-zero-utc
                      BIT STRING (SIZE (32)),
                      BIT STRING (SIZE (8)),
  t-ot-utc
  delta-t-ls-utc
                  BIT STRING (SIZE (8)),
  w-n-t-utc
                      BIT STRING (SIZE (8)),
  w-n-lsf-utc
                      BIT STRING (SIZE (8)),
  dn-utc
                      BIT STRING (SIZE (8)),
  delta-t-lsf-utc
                      BIT STRING (SIZE (8)),
                      ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs} }
  ie-Extensions
                                                                             OPTIONAL,
GPS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HARQ-Info-for-E-DCH ::= ENUMERATED {
   rv0,
   rvtable
```

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```
HARO-MemoryPartitioning ::= CHOICE {
   implicit
                  HARO-MemoryPartitioning-Implicit,
   explicit
                  HARO-MemoryPartitioning-Explicit,
   . . .
HARQ-MemoryPartitioning-Implicit ::= SEQUENCE {
                             INTEGER (1..8,...,12|14|16),
   number-of-Processes
   iE-Extensions
                              ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Implicit-ExtIEs } }
                                                                                                         OPTIONAL,
   . . .
HARO-MemoryPartitioning-Implicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HARO-MemoryPartitioning-Explicit
                                 ::= SEQUENCE {
   hARO-MemoryPartitioningList
                                     HARQ-MemoryPartitioningList,
   iE-Extensions
                                     ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Explicit-ExtIEs } }
                                                                                                                  OPTIONAL,
HARQ-MemoryPartitioning-Explicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- The following IE may only be used in FDD, in MIMO dual stream transmission mode
   . . .
HARO-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHAROProcesses)) OF HARO-MemoryPartitioningItem
HARQ-MemoryPartitioningInfoExtForMIMO ::= SEQUENCE (SIZE (4 | 6 | 8)) OF HARQ-MemoryPartitioningItem
HARO-MemoryPartitioningItem ::= SEOUENCE {
   process-Memory-Size
                                     ENUMERATED
                                     hms800, hms1600, hms2400, hms3200, hms4000,
                                     hms4800, hms5600, hms6400, hms7200, hms8000,
                                     hms8800, hms9600, hms10400, hms11200, hms12000,
                                     hms12800, hms13600, hms14400, hms15200, hms16000,
                                     hms17600, hms19200, hms20800, hms22400, hms24000,
                                     hms25600, hms27200, hms28800, hms30400, hms32000,
                                     hms36000, hms40000, hms44000, hms48000, hms52000,
                                     hms56000, hms60000, hms64000, hms68000, hms72000,
                                     hms76000, hms80000, hms88000, hms96000, hms104000,
                                     hms112000, hms120000, hms128000, hms136000, hms144000,
                                     hms152000, hms160000, hms176000, hms192000, hms208000,
                                     hms224000, hms240000, hms256000, hms272000, hms288000,
                                     hms304000,...},
                                     ProtocolExtensionContainer { { HARO-MemoryPartitioningItem-ExtIEs } }
   iE-Extensions
                                                                                                            OPTIONAL,
HARQ-MemoryPartitioningItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
```

```
HARO-Preamble-Mode ::= ENUMERATED {
  mode0.
  mode1
HARQ-Process-Allocation-2ms-EDCH ::= BIT STRING ( SIZE (maxNrOfEDCHHARQProcesses2msEDCH) )
HARQ-Preamble-Mode-Activation-Indicator ::=ENUMERATED
    hargPreambleModeActivated
HSDPA-Capability ::= ENUMERATED {hsdpa-capable, hsdpa-non-capable}
HS-DSCHProvidedBitRate ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF HS-DSCHProvidedBitRate-Item
HS-DSCHProvidedBitRate-Item ::= SEQUENCE {
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
                                        HS-DSCHProvidedBitRateValue,
    hS-DSCHProvidedBitRateValue
                                        ProtocolExtensionContainer { { HS-DSCHProvidedBitRate-Item-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
    . . .
HS-DSCHProvidedBitRate-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHProvidedBitRateValue ::= INTEGER(0..16777215,...,16777216..256000000)
-- except for 7.68Mcps TDD Unit bit/s, Range 0..2^24-1..2^24..256,000,000, Step 1 bit
-- 7.68Mcps TDD Unit 2bit/s, Range 0..2^24-1..2^24..256,000,000, Step 1
HS-DSCHProvidedBitRateValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-
DSCHProvidedBitRateValueInformation-For-CellPortion-Item
HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item ::= SEQUENCE{
    cellPortionID
                                    CellPortionID,
   hS-DSCHProvidedBitRateValue
                                    HS-DSCHProvidedBitRate,
                                    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,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCHRequiredPower-Item-ExtIEs} }
                                                                                                                       OPTIONAL,
HS-DSCHRequiredPower-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPowerValue ::= INTEGER(0..1000)
-- Unit %, Range 0 ..1000, Step 0.1%
HS-DSCHRequiredPowerPerUEInformation ::= SEQUENCE (SIZE (1.. maxNrOfContextsOnUeList)) OF HS-DSCHRequiredPowerPerUEInformation-Item
HS-DSCHRequiredPowerPerUEInformation-Item ::= SEQUENCE
    cRNC-CommunicationContextID
                                            CRNC-CommunicationContextID,
    hS-DSCHRequiredPowerPerUEWeight
                                            HS-DSCHRequiredPowerPerUEWeight
                                                                                OPTIONAL,
                                            ProtocolExtensionContainer { { HS-DSCHRequiredPowerPerUEInformation-Item-ExtIEs} }
   iE-Extensions
                                                                                                                                   OPTIONAL,
HS-DSCHRequiredPowerPerUEInformation-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCHRequiredPowerPerUEWeight ::= INTEGER(0..100)
-- Unit %, Range 0 ..100, Step 1%
HS-DSCHRequiredPowerValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-DSCHRequiredPowerValueInformation-
For-CellPortion-Item
HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item ::= SEQUENCE{
    cellPortionID
                                CellPortionID,
    hS-DSCHRequiredPowerValue HS-DSCHRequiredPower,
                                ProtocolExtensionContainer { { HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIEs} }
   iE-Extensions
                                                                                                                                      OPTIONAL,
HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDPA-Associated-PICH-Information ::= CHOICE {
    hsdpa-PICH-Shared-with-PCH
                                                    HSDPA-PICH-Shared-with-PCH.
    hsdpa-PICH-notShared-with-PCH
                                                    HSDPA-PICH-notShared-with-PCH,
HSDPA-PICH-Shared-with-PCH ::= SEQUENCE {
    hsdpa-PICH-SharedPCH-ID
                                                    CommonPhysicalChannelID,
```

```
HSDPA-PICH-notShared-with-PCH ::= SEQUENCE {
    hSDPA-PICH-notShared-ID
                                                     CommonPhysicalChannelID,
    fdd-DL-Channelisation-CodeNumber
                                                     FDD-DL-ChannelisationCodeNumber,
    pich-Power
                                                     PICH-Power.
   pich-Mode
                                                     PICH-Mode,
    sttd-Indicator
                                                     STTD-Indicator,
HSDSCH-Common-System-InformationFDD ::= SEQUENCE {
    hsdsch-Common-Information
                                                     HSDSCH-Common-Information
                                                                                                                            OPTIONAL,
    commonMACFlow-Specific-Information
                                                     CommonMACFlow-Specific-InfoList
                                                                                                                            OPTIONAL.
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-Common-System-InformationFDD-ExtIEs } }
                                                                                                                                        OPTIONAL,
HSDSCH-Common-System-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-System-Information-ResponseFDD ::= SEQUENCE {
    hsSCCH-Specific-Information-ResponseFDD
                                                     HSSCCH-Specific-InformationRespListFDD
                                                                                                                         OPTIONAL,
    hARO-MemoryPartitioning
                                                     HARQ-MemoryPartitioning
                                                                                                                         OPTIONAL,
    commonMACFlow-Specific-Info-Response
                                                     CommonMACFlow-Specific-InfoList-Response
                                                                                                                         OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-Common-System-Information-ResponseFDD-ExtIEs } }
    OPTIONAL,
    . . .
HSDSCH-Common-System-Information-ResponseFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-Information ::= SEOUENCE {
    cCCH-PriorityQueue-Id
                                                                     PriorityQueue-Id,
    sRB1-PriorityQueue-Id
                                                                     PriorityQueue-Id,
    associatedCommon-MACFlow
                                                                     Common-MACFlow-ID,
    fACH-Measurement-Occasion-Cycle-Length-Coefficient
                                                                     FACH-Measurement-Occasion-Cycle-Length-Coefficient
                                                                                                                                  OPTIONAL,
    rACH-Measurement-Result
                                                                     RACH-Measurement-Result,
                                                                     BCCH-Specific-HSDSCH-RNTI-Information,
    bCCH-Specific-HSDSCH-RNTI-Information
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-Common-Information-ExtIEs} }
                                                                                                                         OPTIONAL,
HSDSCH-Common-Information-ExtlEs 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,
                                                 CQI-Feedback-Cycle,
    cqiFeedback-CycleK
```

```
cgiRepetitionFactor
                                                 CQI-RepetitionFactor
                                                                                              OPTIONAL,
    -- This IE shall be present if the COI Feedback Cycle k is greater than 0
                                                 AckNack-RepetitionFactor.
    ackNackRepetitionFactor
    cqiPowerOffset
                                                 COI-Power-Offset,
    ackPowerOffset
                                                 Ack-Power-Offset.
    nackPowerOffset
                                                 Nack-Power-Offset,
    hsscch-PowerOffset
                                                 HSSCCH-PowerOffset
                                                                                              OPTIONAL,
    measurement-Power-Offset
                                                 Measurement-Power-Offset
                                                                                              OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs} } 
                                                                                                                         OPTIONAL,
HSDSCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-HARO-Preamble-Mode
                                                     CRITICALITY ignore
                                                                              EXTENSION
                                                                                          HARO-Preamble-Mode
                                                                                                                               PRESENCE optional }
      ID id-MIMO-ActivationIndicator
                                                     CRITICALITY reject
                                                                                          MIMO-ActivationIndicator
                                                                                                                               PRESENCE optional }
                                                                              EXTENSION
      ID id-HSDSCH-MACdPDUSizeFormat
                                                     CRITICALITY reject
                                                                              EXTENSION
                                                                                          HSDSCH-MACdPDUSizeFormat
                                                                                                                               PRESENCE optional }
      ID id-SixtyfourOAM-UsageAllowedIndicator
                                                     CRITICALITY ignore
                                                                                                                               PRESENCE optional }
                                                                              EXTENSION
                                                                                          SixtyfourOAM-UsageAllowedIndicator
      ID id-UE-without-HS-SCCH-constraint-indicator CRITICALITY ignore
                                                                                                                               PRESENCE optional }
                                                                              EXTENSION
      ID id-EnhancedHSServingCC-Abort
                                                                                                                               PRESENCE optional },
                                                     CRITICALITY reject
                                                                              EXTENSION
                                                                                          EnhancedHSServingCC-Abort
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 ::= {
    { ID id-HSSICH-SIRTarget
                                     CRITICALITY ignore
                                                                 EXTENSION
                                                                             UL-SIR
                                                                                                                      PRESENCE
                                                                                                                                  optional}
 -- Applicable to 1.28Mcps TDD only
    { ID id-HSSICH-TPC-StepSize
                                     CRITICALITY ignore
                                                                 EXTENSION
                                                                             TDD-TPC-UplinkStepSize-LCR
                                                                                                                      PRESENCE
                                                                                                                                  optional } |
     -- Applicable to 1.28Mcps TDD only
    { ID id-HSDSCH-MACdPDUSizeFormat
                                        CRITICALITY reject
                                                                 EXTENSION
                                                                             HSDSCH-MACdPDUSizeFormat
                                                                                                                      PRESENCE optional | |
     ID id-tSN-Length
                                     CRITICALITY reject
                                                                                                                      PRESENCE optional },
                                                                 EXTENSION
                                                                            TSN-Length
    -- Applicable for 1.28Mcps TDD when using multiple frequencies
HSDSCH-Information-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info-to-Modify
                                                     HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                                      OPTIONAL,
    priorityQueueInfotoModify
                                                     PriorityQueue-InfoList-to-Modify
                                                                                                                      OPTIONAL,
                                                     MAChsReorderingBufferSize-for-RLC-UM
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    cgiFeedback-CycleK
                                                     CQI-Feedback-Cycle
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    cqiRepetitionFactor
                                                     CQI-RepetitionFactor
                                                                                                                      OPTIONAL,
    ackNackRepetitionFactor
                                                     AckNack-RepetitionFactor
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    cqiPowerOffset
                                                     COI-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                  -- For FDD only
    ackPowerOffset
                                                     Ack-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                 -- For FDD only
    nackPowerOffset
                                                     Nack-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                 -- For FDD only
    hsscch-PowerOffset
                                                     HSSCCH-PowerOffset
                                                                                                                                 -- For FDD only
                                                                                                                      OPTIONAL,
```

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measurement-Power-Offset
                                                     Measurement-Power-Offset
                                                                                                                                  -- For FDD only
                                                                                                                      OPTIONAL,
    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-HARQ-Preamble-Mode
                                                 CRITICALITY ignore
                                                                          EXTENSION
                                                                                      HARO-Preamble-Mode
                                                                                                                       PRESENCE optional }
     ID id-HSSICH-SIRTarget
                                                 CRITICALITY ignore
                                                                                                                       PRESENCE optional }
                                                                          EXTENSION
                                                                                      UL-SIR
     -- Applicable to 1.28Mcps TDD only
    { ID id-ueCapability-Info
                                                                                      UE-Capability-Information
                                                                                                                       PRESENCE optional }
                                                 CRITICALITY ignore
                                                                          EXTENSION
    { ID id-HSSICH-TPC-StepSize
                                                 CRITICALITY ignore
                                                                          EXTENSION
                                                                                      TDD-TPC-UplinkStepSize-LCR
                                                                                                                       PRESENCE optional }
     -- Applicable to 1.28Mcps TDD only
    { ID id-HS-PDSCH-Code-Change-Grant
                                                 CRITICALITY ignore
                                                                                      HS-PDSCH-Code-Change-Grant
                                                                                                                       PRESENCE optional } |
                                                                          EXTENSION
     -- Applicable to FDD only
     ID id-MIMO-Mode-Indicator
                                                                                                                       PRESENCE optional } |
                                                 CRITICALITY reject
                                                                          EXTENSION
                                                                                      MIMO-Mode-Indicator
      ID id-HSDSCH-MACdPDUSizeFormat
                                                 CRITICALITY reject
                                                                          EXTENSION
                                                                                      HSDSCH-MACdPDUSizeFormat
                                                                                                                       PRESENCE optional } |
      ID id-SixtyfourOAM-UsageAllowedIndicator CRITICALITY ignore
                                                                                                                            PRESENCE optional } |
                                                                          EXTENSION
                                                                                      SixtyfourOAM-UsageAllowedIndicator
     ID id-EnhancedHSServingCC-Abort
                                                 CRITICALITY reject
                                                                          EXTENSION
                                                                                      EnhancedHSServingCC-Abort
                                                                                                                            PRESENCE optional },
    . . .
HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEOUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                                      OPTIONAL,
    transportBearerRequestIndicator
                                         TransportBearerRequestIndicator,
                                         BindingID
    bindingID
                                                                                      OPTIONAL,
                                         TransportLayerAddress
    transportLayerAddress
                                                                                      OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs} }
                                                                                                                                  OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    {ID id-TnlOos
                            CRITICALITY ignore
                                                     EXTENSION TnlOos
                                                                          PRESENCE optional }.
    . . .
HSDSCH-MACdPDUSizeFormat ::= ENUMERATED {
    indexedMACdPDU-Size,
    flexibleMACdPDU-Size
HSDSCH-MACdPDU-SizeCapability ::= ENUMERATED {
    indexedSizeCapable,
    flexibleSizeCapable
HSDSCH-Information-to-Modify-Unsynchronised ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info-to-Modify
                                                     HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                                       OPTIONAL,
    priorityQueueInfotoModifyUnsynchronised
                                                     PriorityQueue-InfoList-to-Modify-Unsynchronised
                                                                                                                      OPTIONAL,
    cqiPowerOffset
                                                     COI-Power-Offset
                                                                                                                      OPTIONAL,
                                                                                                                                   -- For FDD only
```

```
ackPowerOffset
                                                    Ack-Power-Offset
                                                                                                                     OPTIONAL, -- For FDD only
    nackPowerOffset
                                                    Nack-Power-Offset
                                                                                                                     OPTIONAL, -- For FDD only
    hsscch-PowerOffset
                                                    HSSCCH-PowerOffset
                                                                                                                     OPTIONAL. -- For FDD only
    tDDAckNackPowerOffset
                                                    TDD-AckNack-Power-Offset
                                                                                                                     OPTIONAL, -- For TDD only
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs} }
    OPTIONAL,
HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      ID id-HARQ-Preamble-Mode
                                                                                                                     PRESENCE optional }
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     HARO-Preamble-Mode
                                                                                                                     PRESENCE optional }
    { ID id-HSSICH-SIRTarget
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     UL-SIR
     -- Applicable to 1.28Mcps TDD only
     ID id-ueCapability-Info
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     UE-Capability-Information
                                                                                                                     PRESENCE optional }
     ID id-HSSICH-TPC-StepSize
                                                CRITICALITY ignore
                                                                         EXTENSION
                                                                                     TDD-TPC-UplinkStepSize-LCR
                                                                                                                     PRESENCE optional |
     -- Applicable to 1.28Mcps TDD only
     ID id-MIMO-Mode-Indicator
                                                                                                                     PRESENCE optional } |
                                                CRITICALITY reject
                                                                         EXTENSION MIMO-Mode-Indicator
      ID id-SixtyfourOAM-UsageAllowedIndicator CRITICALITY ignore
                                                                                     SixtyfourOAM-UsageAllowedIndicator
                                                                                                                          PRESENCE optional |
                                                                         EXTENSION
    ID id-EnhancedHSServingCC-Abort
                                                                                                                           PRESENCE optional },
                                                CRITICALITY reject
                                                                         EXTENSION
                                                                                     EnhancedHSServingCC-Abort
HSDSCH-FDD-Information-Response ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-InformationResp
                                                    HSDSCH-MACdFlow-Specific-InformationResp
                                                                                                                                    OPTIONAL,
                                                    HSSCCH-Specific-InformationRespListFDD
    hsSCCH-Specific-Information-ResponseFDD
                                                                                                                                    OPTIONAL,
    hARO-MemoryPartitioning
                                                    HARO-MemoryPartitioning
                                                                                                                                    OPTIONAL.
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }
                                                                                                                                   OPTIONAL,
    . . .
HSDSCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   ID id-HARQ-Preamble-Mode-Activation-Indicator
                                                        CRITICALITY ignore EXTENSION
                                                                                        HARQ-Preamble-Mode-Activation-Indicator
    PRESENCE
                optional}|
    { ID id-MIMO-N-M-Ratio
                                                                                                                                    PRESENCE
                                                         CRITICALITY ignore EXTENSION
                                                                                        MIMO-N-M-Ratio
optional}|
      ID id-SixtyfourQAM-DL-UsageIndicator
                                                        CRITICALITY ignore EXTENSION SixtyfourQAM-DL-UsageIndicator
                                                                                                                           PRESENCE optional } |
     ID id-HSDSCH-TBSizeTableIndicator
                                                         CRITICALITY ignore EXTENSION HSDSCH-TBSizeTableIndicator
                                                                                                                           PRESENCE optional },
HS-DSCH-FDD-Secondary-Serving-Information ::= SEQUENCE {
    hsscch-PowerOffset
                                            HSSCCH-PowerOffset
                                                                                         OPTIONAL.
    measurement-Power-Offset
                                            Measurement-Power-Offset,
    sixtyfourQAM-UsageAllowedIndicator
                                            SixtyfourQAM-UsageAllowedIndicator
                                                                                         OPTIONAL,
    hSDSCH-RNTI
                                            HSDSCH-RNTI,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-ExtIEs } }
                                                                                                                                   OPTIONAL,
HS-DSCH-FDD-Secondary-Serving-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-FDD-Secondary-Serving-Information-Response ::= SEQUENCE {
```

. . .

```
hsSCCH-Specific-Information-ResponseFDD
                                                HSSCCH-Specific-InformationRespListFDD
                                                                                                      OPTIONAL,
    sixtyfourOAM-DL-UsageIndicator
                                                SixtyfourOAM-DL-UsageIndicator
                                                                                                      OPTIONAL,
    hSDSCH-TBSizeTableIndicator
                                                HSDSCH-TBSizeTableIndicator
                                                                                                      OPTIONAL.
    iE-Extensions
                                    ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtIEs } }
                                                                                                                                       OPTIONAL,
HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Information-To-Modify ::= SEQUENCE
    hsscch-PowerOffset
                                                HSSCCH-PowerOffset
                                                                                                   OPTIONAL.
    measurement-Power-Offset
                                                Measurement-Power-Offset
                                                                                                   OPTIONAL,
    hSSCCH-CodeChangeGrant
                                                HSSCCH-Code-Change-Grant
                                                                                                   OPTIONAL,
    sixtyfourOAM-UsageAllowedIndicator
                                                SixtyfourOAM-UsageAllowedIndicator
                                                                                                   OPTIONAL,
                                                ProtocolExtensionContainer { { HS-DSCH-Secondary-Serving-Information-To-Modify-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HS-DSCH-Secondary-Serving-Information-To-Modify-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised ::= SEQUENCE {
                                                HSSCCH-PowerOffset
    hsscch-PowerOffset
                                                                                                   OPTIONAL,
    sixtyfourOAM-UsageAllowedIndicator
                                                SixtyfourOAM-UsageAllowedIndicator
                                                                                                   OPTIONAL,
                            ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-FDD-Secondary-Serving-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                HSSCCH-CodeChangeIndicator
                                                                                             OPTIONAL,
    hS-PDSCH-Code-Change-Indicator
                                                HS-PDSCH-Code-Change-Indicator
                                                                                             OPTIONAL,
                                                ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Update-Information-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HS-DSCH-FDD-Secondary-Serving-Update-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response ::= SEQUENCE
    hS-DSCH-Secondary-Serving-cell-choice
                                                HS-DSCH-Secondary-Serving-cell-change-choice,
    iE-Extensions
                                                ProtocolExtensionContainer { { HS-DSCH-Secondary-Serving-Cell-Change-Information-Response-ExtIEs }
       OPTIONAL,
```

```
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-cell-change-choice ::= CHOICE
    hS-Secondary-Serving-cell-change-successful
                                                         HS-Secondary-Serving-cell-change-successful,
    hS-Secondary-Serving-cell-change-unsuccessful
                                                         HS-Secondary-Serving-cell-change-unsuccessful,
    . . .
HS-Secondary-Serving-cell-change-successful ::= SEQUENCE {
    hS-DSCH-FDD-Secondary-Serving-Information-Response
                                                            HS-DSCH-FDD-Secondary-Serving-Information-Response,
    iE-Extensions
                                        ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-successful-ExtIEs} } OPTIONAL,
HS-Secondary-Serving-cell-change-successful-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HS-Secondary-Serving-cell-change-unsuccessful ::= SEQUENCE {
    iE-Extensions
                                    ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
HS-Secondary-Serving-cell-change-unsuccessful-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Remove ::= NULL
HSDSCH-Paging-System-InformationFDD ::= SEQUENCE {
    paging-MACFlow-Specific-Information
                                                    Paging-MACFlow-Specific-Information,
    hSSCCH-Power
                                                    DL-Power,
    hSPDSCH-Power
                                                    DL-Power,
    number-of-PCCH-transmission
                                                    Number-of-PCCH-transmission,
    transport-Block-Size-List
                                                    Transport-Block-Size-List,
                                                    ProtocolExtensionContainer { { HSDSCH-Paging-System-InformationFDD-ExtIEs } }
    iE-Extensions
                                                                                                                                       OPTIONAL,
    . . .
HSDSCH-Paging-System-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Paging-System-Information-ResponseFDD ::= SEQUENCE (SIZE (1..maxNrOfPagingMACFlow)) OF HSDSCH-Paging-System-Information-ResponseList
HSDSCH-Paging-System-Information-ResponseList ::= SEQUENCE {
    pagingMACFlow-ID
                                                     Paging-MACFlow-ID,
    bindingID
                                                     BindingID
                                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                                 OPTIONAL,
```

```
hSPDSCH-Code-Index
                                                    HSPDSCH-Code-Index.
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-Paging-System-Information-ResponseList-ExtIEs } }
    OPTIONAL.
HSDSCH-Paqing-System-Information-ResponseList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-TDD-Information-Response ::= SEQUENCE {
   hsDSCH-MACdFlow-Specific-InformationResp
                                                    HSDSCH-MACdFlow-Specific-InformationResp
                                                                                                 OPTIONAL,
    hsSCCH-Specific-Information-ResponseTDD
                                                    HSSCCH-Specific-InformationRespListTDD
                                                                                                 OPTIONAL, -- Not Applicable to 1.28Mcps TDD or
7.68Mcps TDD
    hsSCCH-Specific-Information-ResponseTDDLCR
                                                    HSSCCH-Specific-InformationRespListTDDLCR OPTIONAL, -- Not Applicable to 3.84Mcps TDD or
7.68Mcps TDD, This HSSCCH Specific Information is for the first Frequency repetition, HSSCCH Specific Information for Frequency repetitions 2 and
on, should be defined in MultipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
    hARO-MemoryPartitioning
                                                    HARO-MemoryPartitioning
                                                                                                 OPTIONAL, -- This HARO Memory Partitioning
Information is for the first Frequency repetition, HARO Memory Partitioning Information for Frequency repetitions 2 and on, should be defined in
MultipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }
                                                                                                                                   OPTIONAL,
    . . .
HSDSCH-TDD-Information-Response-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-hsSCCH-Specific-Information-ResponseTDD768
                                                                        CRITICALITY ignore EXTENSION HSSCCH-Specific-InformationRespListTDD768
    PRESENCE optional } |
{ ID id-UARFCNforNt
                                                                        CRITICALITY ignore EXTENSION UARFON
                    PRESENCE optional |
    -- Applicable to 1.28Mcps TDD when using multiple frequencies , This is the UARFCN for the first Frequency repetition
{ ID id-multipleFreq-HSPDSCH-InformationList-ResponseTDDLCR
                                                                        CRITICALITY ignore EXTENSION MultipleFreg-HSPDSCH-InformationList-
ResponseTDDLCR PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD when using multiple frequencies , This MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR is the HS-SCCH and HARQ
Memory Partitioning information for the 2nd and beyond HS-PDSCH frequencies.
{ ID id-multicarrier-number
                                                                        CRITICALITY ignore EXTENSION Multicarrier-Number
                    PRESENCE optional },
    -- Applicable for 1.28Mcps TDD when using multiple frequencies
    . . .
HSDSCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InformationResp-Item
HSDSCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    hsDSCHMacdFlow-Id
                                                    HSDSCH-MACdFlow-ID,
    bindingID
                                                    BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                    HSDSCH-Initial-Capacity-Allocation OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
HSDSCH-MACdFlows-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info
                                                     HSDSCH-MACdFlow-Specific-InfoList,
    priorityOueue-Info
                                                     PriorityOueue-InfoList,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-MACdFlows-Information-ExtIEs } }
                                                                                                                                    OPTIONAL,
HSDSCH-MACdFlows-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem
HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
                                        HSDSCH-MACdFlow-ID,
    hsDSCH-MACdFlow-ID
    allocationRetentionPriority
                                        AllocationRetentionPriority,
                                        BindingID
    bindingID
                                                                     OPTIONAL,
    transportLayerAddress
                                        TransportLayerAddress
                                                                     OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs} }
                                                                                                                        OPTIONAL,
HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlOos
                            CRITICALITY ignore
                                                     EXTENSION TnlOos
                                                                         PRESENCE optional },
    . . .
HSDSCH-MACdFlows-to-Delete ::= SEOUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlows-to-Delete-Item
HSDSCH-MACdFlows-to-Delete-Item ::= SEQUENCE {
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlows-to-Delete-Item-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
    . . .
HSDSCH-MACdFlows-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-TBSizeTableIndicator ::= ENUMERATED {
    octet-aligned
HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
HSDSCH-Initial-Capacity-Allocation: = SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF HSDSCH-Initial-Capacity-AllocationItem
HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    maximum-MACdPDU-Size
                                    MACdPDU-Size,
```

```
hSDSCH-InitialWindowSize
                                    HSDSCH-InitialWindowSize,
    iE-Extensions
                                    ProtocolExtensionContainer { { HSDSCH-Initial-Capacity-AllocationItem-ExtIEs } } OPTIONAL,
HSDSCH-Initial-Capacity-AllocationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MaximumMACdPDU-SizeExtended
                                            CRITICALITY ignore
                                                                    EXTENSION
                                                                                MAC-PDU-SizeExtended PRESENCE optional },
    . . .
HSDSCH-InitialWindowSize
                                    ::= INTEGER (1..255)
-- Number of MAC-d PDUs.
HSDSCH-PreconfigurationInfo ::= SEQUENCE {
    setsOfHS-SCCH-Codes
                           SetsOfHS-SCCH-Codes,
    hARO-MemoryPartitioning
                                HARO-MemoryPartitioning,
    e-DCH-FDD-DL-Control-Channel-Information
                                                    E-DCH-FDD-DL-Control-Channel-Information
                                                                                                  OPTIONAL,
    hARO-Preamble-Mode-Activation-Indicator
                                                HARO-Preamble-Mode-Activation-Indicator
                                                                                            OPTIONAL,
    mIMO-N-M-Ratio
                           MIMO-N-M-Ratio
                                                OPTIONAL,
    continuousPacketConnectivityHS-SCCH-less-Information-Response ContinuousPacketConnectivityHS-SCCH-less-Information-Response
                                                                                                                                      OPTIONAL,
                                        ProtocolExtensionContainer { { HSDSCH-PreconfigurationInfo-ExtIEs} }
    iE-Extensions
HSDSCH-PreconfigurationInfo-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
HSDSCH-PreconfigurationSetup ::= SEQUENCE {
    mAChsResetScheme
                            MAChsResetScheme,
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                MAChsReorderingBufferSize-for-RLC-UM,
    secondaryServingCells
                                SecondaryServingCells
                                                                OPTIONAL,
    numPrimaryHS-SCCH-Codes
                                NumHS-SCCH-Codes
                                                            OPTIONAL,
    hARQ-Preamble-Mode
                           HARO-Preamble-Mode
                                                                    OPTIONAL,
                                    MIMO-ActivationIndicator
                                                                        OPTIONAL,
    mIMO-ActivationIndicator
                                    HSDSCH-MACdPDUSizeFormat
    hSDSCH-MACdPDUSizeFormat
                                                                        OPTIONAL,
    sixtyfourQAM-UsageAllowedIndicator
                                            SixtyfourOAM-UsageAllowedIndicator
                                                                                        OPTIONAL,
    uE-without-HS-SCCH-constraint-indicator
                                                            OPTIONAL,
    continuousPacketConnectivityHS-SCCH-less-Information
                                                                    ContinuousPacketConnectivityHS-SCCH-less-Information
                                                                                                                             OPTIONAL.
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCHPreconfigurationSetup-ExtIEs } }
HSDSCHPreconfigurationSetup-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
HS-SCCH-PreconfiguredCodes
                                        ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HS-SCCH-PreconfiguredCodesItem
HS-SCCH-PreconfiguredCodesItem ::= SEQUENCE {
```

```
hS-SCCH-CodeNumber
                                HS-SCCH-CodeNumber,
    iE-Extensions
                            ProtocolExtensionContainer { { HS-SCCH-PreconfiguredCodesItem-ExtIEs} } OPTIONAL,
HS-SCCH-PreconfiguredCodesItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-CodeNumber ::= INTEGER (0..127)
HSSCCH-Specific-InformationRespListFDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Codes
HSSCCH-Codes ::= SEQUENCE {
    codeNumber
                                                    INTEGER (0..127),
                                                    ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemFDD-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
HSSCCH-Specific-InformationRespItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSCCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD
HSSCCH-Specific-InformationRespItemTDD ::= SEQUENCE {
    timeslot
                                                    TimeSlot,
                                                    MidambleShiftAndBurstType,
    midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
    hSSICH-Info
                                                    HSSICH-Info,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD-ExtIEs } }
    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
    iE-Extensions
                                                ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDDLCR-ExtIEs } }
    OPTIONAL,
HSSCCH-Specific-InformationRespItemTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ID id-UARFCNforNt
                            CRITICALITY reject
                                                     EXTENSION UARFCN
                                                                             PRESENCE optional },
    -- Applicable for 1.28Mcps TDD when using multiple frequencies. this IE indicates the frequency which is actually used by the HS-SCCH
HSSCCH-Specific-InformationRespListTDD768 ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD768
HSSCCH-Specific-InformationRespItemTDD768 ::= SEQUENCE {
    timeslot
    midambleShiftAndBurstType768
                                                     MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                    TDD-ChannelisationCode768,
   hSSICH-Info768
                                                    HSSICH-Info768,
                                                     ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD768-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSSCCH-Specific-InformationRespItemTDD768-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSICH-Info ::= SEQUENCE {
   hsSICH-ID
                                                     HS-SICH-ID,
    timeslot
                                                     TimeSlot,
   midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
                                                     ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }
    iE-Extensions
                                                                                                                  OPTIONAL,
HSSICH-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSSICH-InfoLCR ::= 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 ::= {
    { ID id-Extended-HS-SICH-ID
                                                         CRITICALITY ignore EXTENSION Extended-HS-SICH-ID PRESENCE optional }.
    -- used if the HS-SICH identity has a value larger than 31
HSSICH-Info768 ::= SEQUENCE {
   hsSICH-ID
                                                     HS-SICH-ID,
    timeslot
                                                     TimeSlot,
   midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                    TDD-ChannelisationCode768,
```

```
ProtocolExtensionContainer { { HSSICH-Info-768-ExtIEs } }
    iE-Extensions
                                                                                                                   OPTIONAL,
HSSICH-Info-768-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
HS-SICH-Reception-Quality-Value ::= SEQUENCE
    failed-HS-SICH
                               HS-SICH-failed,
    missed-HS-SICH
                               HS-SICH-missed,
    total-HS-SICH
                               HS-SICH-total,
    iE-Extensions
                               ProtocolExtensionContainer { { HS-SICH-Reception-Quality-Value-ExtIEs} } OPTIONAL,
HS-SICH-Reception-Quality-Value-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Additional-failed-HS-SICH
                                           CRITICALITY reject
                                                                    EXTENSION HS-SICH-failed
                                                                                                    PRESENCE
                                                                                                                optional }
    -- Mandatory for 1.28Mcps TDD only, used when there are more than 20 failed HS-SICH
    {ID id-Additional-missed-HS-SICH
                                           CRITICALITY reject
                                                                    EXTENSION HS-SICH-missed
                                                                                                    PRESENCE optional } |
    -- Mandatory for 1.28Mcps TDD only, used when there are more than 20 missed HS-SICH
    {ID id-Additional-total-HS-SICH
                                           CRITICALITY reject
                                                                                                    PRESENCE optional },
                                                                    EXTENSION HS-SICH-total
    -- Mandatory for 1.28Mcps TDD only, used when there are more than 20 total HS-SICH
HS-SICH-failed ::= INTEGER (0..20)
HS-SICH-missed ::= INTEGER (0..20)
HS-SICH-total ::= INTEGER (0..20)
HS-SICH-Reception-Quality-Measurement-Value ::= INTEGER (0..20)
-- According to mapping in [23]
HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)
HSDSCH-RNTI ::= INTEGER (0..65535)
HS-PDSCH-FDD-Code-Information ::= SEQUENCE {
    number-of-HS-PDSCH-codes
                                                    INTEGER (0..maxHS-PDSCHCodeNrComp-1),
    hS-PDSCH-Start-code-number
                                               HS-PDSCH-Start-code-number
                                                                                OPTIONAL,
-- Only included when number of HS-DSCH codes > 0
                               ProtocolExtensionContainer { { HS-PDSCH-FDD-Code-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
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 {
                           HS-SCCH-FDD-Code-List,
    replace
    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
HS-PDSCH-Code-Change-Indicator ::= ENUMERATED {
    hsPDSCHCodeChangeNeeded
HS-PDSCH-Code-Change-Grant ::= ENUMERATED {
    changeGranted
HSDSCH-Configured-Indicator::= ENUMERATED {
    configured-HS-DSCH,
    no-configured-HS-DSCH
HS-DSCH-Serving-Cell-Change-Info ::= SEQUENCE {
    hspdsch-RL-ID
                                    RL-ID,
    hSDSCH-FDD-Information
                                    HSDSCH-FDD-Information OPTIONAL,
                                    HSDSCH-RNTI,
    hsdsch-RNTI
                                    ProtocolExtensionContainer { { HS-DSCH-Serving-Cell-Change-Info-ExtIEs} }
    iE-Extensions
                                                                                                                     OPTIONAL,
    . . .
HS-DSCH-Serving-Cell-Change-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-ContinuousPacketConnectivityHS-SCCH-less-Information
                                                                    CRITICALITY reject
                                                                                             EXTENSION ContinuousPacketConnectivityHS-SCCH-less-
Information
                    PRESENCE optional },
HS-DSCH-Serving-Cell-Change-Info-Response::= SEQUENCE
    hS-DSCH-serving-cell-choice
                                    HS-DSCH-serving-cell-choice,
                                    ProtocolExtensionContainer { { HS-DSCH-serving-cell-informationResponse-ExtIEs} } OPTIONAL,
    iE-Extensions
```

```
HS-DSCH-serving-cell-informationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-serving-cell-choice ::= CHOICE {
   hS-serving-cell-change-successful
                                          HS-serving-cell-change-successful,
   hS-serving-cell-change-unsuccessful
                                          HS-serving-cell-change-unsuccessful,
HS-serving-cell-change-successful ::= SEQUENCE
   hSDSCH-FDD-Information-Response
                                      HSDSCH-FDD-Information-Response,
   iE-Extensions
                                      ProtocolExtensionContainer { { HS-serving-cell-change-successful-ExtIEs} } OPTIONAL,
HS-serving-cell-change-successful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    EXTENSION ContinuousPacketConnectivityHS-SCCH-
less-Information-Response
                                  PRESENCE optional },
HS-serving-cell-change-unsuccessful ::= SEQUENCE {
   cause
   iE-Extensions
                                  ProtocolExtensionContainer { { HS-serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
HS-serving-cell-change-unsuccessful-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-DRX-Cycle-FACH ::= ENUMERATED {v4, v8, v16, v32, ...}
HS-DSCH-RX-Burst-FACH::= ENUMERATED {v2, v4, v8, v16, ...}
HSDSCH-FDD-Update-Information ::= SEQUENCE {
   hsSCCHCodeChangeIndicator
                                                  HSSCCH-CodeChangeIndicator
                                                                                            OPTIONAL,
                                                                                            OPTIONAL,
    cqiFeedback-CycleK
                                                  CQI-Feedback-Cycle
    cqiRepetitionFactor
                                                  CQI-RepetitionFactor
                                                                                            OPTIONAL,
                                                  AckNack-RepetitionFactor
    ackNackRepetitionFactor
                                                                                            OPTIONAL,
    caiPowerOffset
                                                  COI-Power-Offset
                                                                                            OPTIONAL,
                                                  Ack-Power-Offset
    ackPowerOffset
                                                                                            OPTIONAL,
   nackPowerOffset
                                                  Nack-Power-Offset
                                                                                            OPTIONAL,
                                                  ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }
   iE-Extensions
                                                                                                                           OPTIONAL,
HSDSCH-FDD-Update-Information-ExtlEs NBAP-PROTOCOL-EXTENSION ::=
    {ID id-HS-PDSCH-Code-Change-Indicator
                                              CRITICALITY ignore
                                                                                HS-PDSCH-Code-Change-Indicator PRESENCE optional },
                                                                     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 ::=
HSPDSCH-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
-- index of first HS-PDSCH code
HSPDSCH-First-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
    -- index of first HS-PDSCH code
HSPDSCH-Second-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
    -- index of second HS-PDSCH code
HSPDSCH-Second-Code-Support ::= BOOLEAN
    -- true: applied, false: not applied
HSDPA-Associated-PICH-InformationLCR ::= CHOICE {
    hsdpa-PICH-Shared-with-PCH
                                                     HSDPA-PICH-Shared-with-PCH,
    hsdpa-PICH-notShared-with-PCHLCR
                                                     HSDPA-PICH-notShared-with-PCHLCR,
HSDPA-PICH-notShared-with-PCHLCR ::= SEQUENCE {
    hSDPA-PICH-notShared-ID
                                            CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    pagingIndicatorLength
                                            PagingIndicatorLength,
                                            PICH-Power,
    pICH-Power
    second-TDD-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    sttd-Indicator
                                            STTD-Indicator,
                                            ProtocolExtensionContainer { { HSDPA-PICH-notShared-with-PCHLCR-ExtIEs } }
    iE-Extensions
                                                                                                                           OPTIONAL,
    . . .
HSDPA-PICH-notShared-with-PCHLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-System-InformationLCR ::= SEQUENCE {
    hsdsch-Common-InformationLCR
                                                     HSDSCH-Common-InformationLCR
                                                                                                                           OPTIONAL.
```

```
commonMACFlow-Specific-InformationLCR
                                                   CommonMACFlow-Specific-InfoListLCR
                                                                                                                        OPTIONAL,
    common-H-RNTI-InformationLCR
                                                   Common-H-RNTI-InformationLCR
                                                                                                                        OPTIONAL.
    sync-InformationLCR
                                                   Sync-InformationLCR
                                                                                                                        OPTIONAL.
    tDD-AckNack-Power-Offset
                                                   TDD-AckNack-Power-Offset
                                                                                                                        OPTIONAL,
    hSSICH-SIRTarget
                                                   UL-SIR
                                                                                                                        OPTIONAL.
                                                   TDD-TPC-UplinkStepSize-LCR
    hSSICH-TPC-StepSize
                                                                                                                        OPTIONAL,
                                                   ProtocolExtensionContainer { { HSDSCH-Common-System-InformationLCR-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
HSDSCH-Common-System-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-System-Information-ResponseLCR ::= SEQUENCE
    hsSCCH-Specific-Information-ResponseLCR
                                                   HSSCCH-Specific-InformationRespListLCR
                                                                                                                     OPTIONAL,
    hARO-MemoryPartitioning
                                                   HARO-MemoryPartitioning
                                                                                                                     OPTIONAL,
    commonMACFlow-Specific-Info-ResponseLCR
                                                   CommonMACFlow-Specific-InfoList-ResponseLCR
                                                                                                                     OPTIONAL,
                                                   ProtocolExtensionContainer { { HSDSCH-Common-System-Information-ResponseLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-Common-System-Information-ResponseLCR-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Common-InformationLCR ::= SEQUENCE
                                                                   PriorityOueue-Id,
    cCCH-PriorityOueue-Id
    sRB1-PriorityQueue-Id
                                                                   PriorityOueue-Id,
    associatedCommon-MACFlowLCR
                                                                   Common-MACFlow-ID-LCR,
    fACH-Measurement-Occasion-Cycle-Length-Coefficient
                                                                   FACH-Measurement-Occasion-Cycle-Length-Coefficient
                                                                                                                              OPTIONAL,
    bCCH-Specific-HSDSCH-RNTI-InformationLCR
                                                                   BCCH-Specific-HSDSCH-RNTI-InformationLCR
                                                                                                                              OPTIONAL,
                                       iE-Extensions
                                                                                                                              OPTIONAL,
    . . .
HSDSCH-Common-InformationLCR-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Paging-System-InformationLCR ::= SEQUENCE
    paging-MACFlow-Specific-InformationLCR
                                                   Paging-MACFlow-Specific-InformationLCR,
    hSSCCH-Power
                                                   DL-Power
                                                                                                                                    OPTIONAL,
   hSPDSCH-Power
                                                   DL-Power
                                                                                                                                    OPTIONAL,
    reception-Window-Size
                                                   INTEGER (1..16)
                                                                                                                                    OPTIONAL,
   n-PCH
                                                   INTEGER (1..8)
                                                                                                                                    OPTIONAL,
    paging-Subchannel-Size
                                                   INTEGER (1..3)
                                                                                                                                    OPTIONAL,
    transport-Block-Size-List
                                                   Transport-Block-Size-List
                                                                                                                                    OPTIONAL,
                                                   ProtocolExtensionContainer { { HSDSCH-Paging-System-InformationLCR-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
HSDSCH-Paging-System-InformationLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
HSDSCH-Paging-System-Information-ResponseLCR ::= SEQUENCE (SIZE (1..maxNrOfPagingMACFlow)) OF HSDSCH-Paging-System-Information-ResponseListLCR
HSDSCH-Paging-System-Information-ResponseListLCR ::= SEOUENCE {
   pagingMACFlow-ID
                                               Paging-MACFlow-ID,
   bindingID
                                               BindingID
                                                                                       OPTIONAL,
   transportLayerAddress
                                               TransportLayerAddress
                                                                                       OPTIONAL,
                                                          DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst,
   dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                               ProtocolExtensionContainer { { HSDSCH-Paging-System-Information-ResponseListLCR-ExtIEs } }
   iE-Extensions
   OPTIONAL,
   . . .
HSDSCH-Paging-System-Information-ResponseListLCR-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-ID-LCR ::= INTEGER (0..255)
HSSCCH-Specific-InformationRespListLCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHsLCR)) OF HSSCCH-Specific-InformationRespItemLCR
HSSCCH-Specific-InformationRespItemLCR ::= SEQUENCE {
   hs-scch-id-Lcr
                                               HS-SCCH-ID-LCR,
   iE-Extensions
                                               OPTIONAL,
HSSCCH-Specific-InformationRespItemLCR-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,
```

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```
sIB4,
    sIB5,
    sIB6,
    sIB7,
    not-Used-sIB8,
    not-Used-sIB9,
    not-Used-sIB10,
    sIB11,
    sIB12,
    sIB13,
    sIB13dot1,
    sIB13dot2,
    sIB13dot3,
    sIB13dot4,
    sIB14,
    sIB15,
    sIB15dot1,
    sIB15dot2,
    sIB15dot3,
    sIB16,
    . . . ,
    sIB17,
    sIB15dot4,
    sIB18.
    sIB15dot5,
    sIB5bis,
    sIB11bis,
    sIB15bis,
    sIB15dot1bis,
    sIB15dot2bis,
    sIB15dot3bis,
    sIB15dot6,
    sIB15dot7,
    sIB15dot8,
    sIB15dot2ter.
    sIB19
IMB-Parameters ::= SEQUENCE {
    sub-Frame-Number
                             Sub-Frame-Number,
    ie-Extensions
                             ProtocolExtensionContainer { { IMB-Parameters-ExtIEs} } OPTIONAL,
    . . .
IMB-Parameters-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
Inactivity-Threshold-for-UE-DRX-Cycle ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512}
-- Unit subframe
```

```
Inactivity-Threshold-for-UE-DTX-Cycle2 ::= ENUMERATED {v1, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
Inactivity-Threshold-for-UE-Grant-Monitoring ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
InformationReportCharacteristics ::= CHOICE {
    onDemand
                            InformationReportCharacteristicsType-ReportPeriodicity,
    periodic
                            InformationReportCharacteristicsType-OnModification,
    onModification
InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
                        ReportPeriodicity-Scaledmin,
                        ReportPeriodicity-Scaledhour,
    hours
InformationReportCharacteristicsType-OnModification ::= SEQUENCE
    information-thresholds
                                  InformationThresholds
    ie-Extensions
                                  ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs} } OPTIONAL,
InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
InformationThresholds ::= CHOICE {
                        DGPSThresholds,
    dgps
    . . . ,
    dGANSSThreshold
                        DGANSSThreshold
InformationExchangeID ::= INTEGER (0..1048575)
InformationType ::= SEQUENCE {
    information-Type-Item
                                Information-Type-Item,
    qPSInformation
                                GPS-Information
                                                                                                 OPTIONAL,
    -- The IE shall be present if the Information Type Item IE indicates "GPS Information".
    iE-Extensions
                                ProtocolExtensionContainer { { Information-Type-ExtIEs} } 
                                                                                                 OPTIONAL,
    . . .
Information-Type-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
-- The following IE shall be present if the Information Type Item IE indicates "GANSS Information"
    { ID id-GANSS-Information
                                        CRITICALITY ignore EXTENSION GANSS-Information
                                                                                                 PRESENCE conditional } |
-- The following IE shall be present if the Information Type Item IE indicates "DGANSS Corrections"
```

```
{ ID id-DGANSS-Corrections-Req
                                        CRITICALITY ignore EXTENSION DGANSS-Corrections-Req
                                                                                                 PRESENCE conditional },
Information-Type-Item ::= ENUMERATED
    qpsinformation,
    dqpscorrections,
    gpsrxpos,
    qANSSInformation,
    dGANSSCorrections,
    qANSS-RX-Pos
Initial-DL-DPCH-TimingAdjustment-Allowed ::= ENUMERATED {
    initial-DL-DPCH-TimingAdjustment-Allowed
InnerLoopDLPCStatus ::= ENUMERATED {
    active,
    inactive
IPDL-Indicator ::= ENUMERATED {
    active,
    inactive
IPDL-FDD-Parameters ::= SEQUENCE {
    iP-SpacingFDD
                                     ENUMERATED{sp5,sp7,sp10,sp15,sp20,sp30,sp40,sp50,...},
    iP-Length
                                     ENUMERATED{len5, len10},
                                    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 {
                                     ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
    iP-SpacingTDD
    iP-Start
                                    INTEGER (0..4095),
   iP-Slot
                                    INTEGER(0..14),
    iP-PCCPCH
                                    ENUMERATED{switchOff-1-Frame, switchOff-2-Frames},
    burstModeParams
                                    BurstModeParams
                                                        OPTIONAL,
                            ProtocolExtensionContainer { { IPDLTDDParameter-ExtIEs} }
    iE-Extensions
```

```
IPDL-TDD-Parameters-LCR ::= SEQUENCE {
   iP-SpacingTDD
                                ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
   iP-Start
                                INTEGER (0..4095),
   iP-Sub
                                ENUMERATED{first, second, both},
                                BurstModeParams
                                                  OPTIONAL,
   burstModeParams
                         ProtocolExtensionContainer { { IPDLTDDParameterLCR-ExtIEs} }
   iE-Extensions
                                                                                   OPTIONAL,
IPMulticastIndication ::= SEQUENCE {
   transportLayerAddress
                                TransportLayerAddress,
   bindingID
                                BindingID,
   cFNOffset
                                INTEGER (0..255),
   iE-Extensions
                         ProtocolExtensionContainer { { IPMulticastIndication-ExtIEs} } OPTIONAL,
IPMulticastIndication-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPMulticastDataBearerIndication ::= BOOLEAN
-- true: IP Multicast used, false: IP Multicast not used
BurstModeParams ::= SEQUENCE {
   burstStart
                                    INTEGER(0..15),
   burstLength
                                    INTEGER (10..25),
   burstFreq
                                    INTEGER (1..16),
IPDLTDDParameter-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
IPDLTDDParameterLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  _____
-- -----
LimitedPowerIncrease ::= ENUMERATED {
   used,
```

```
not-used
Local-Cell-ID ::= INTEGER (0..268435455)
LTGI-Presence ::= BOOLEAN
-- True = the Long Term Grant Indicator shall be used within E-DCH grants
LCRTDD-Uplink-Physical-Channel-Capability ::= SEQUENCE {
   maxTimeslotsPerSubFrame
                                     INTEGER (1..6),
   maxPhysChPerTimeslot
                                     ENUMERATED {one, two, ..., three, four},
                                     ProtocolExtensionContainer { { LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs} } OPTIONAL,
   iE-Extensions
LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- -----
MAC-DTX-Cycle-2ms ::= ENUMERATED {v1, v4, v5, v8, v10, v16, v20}
MAC-DTX-Cycle-10ms ::= ENUMERATED {v5, v10, v20}
MAC-ehs-Reset-Timer ::= ENUMERATED {v1, v2, v3, v4,...}
MACdPDU-Size ::= INTEGER (1..5000,...)
   -- In case of E-DCH value 8 and values not multiple of 8 shall not be used
MAC-PDU-SizeExtended ::= INTEGER (1..1504,...)
   -- In case of E-DCH value 1 shall not be used
MAC-Inactivity-Threshold ::= ENUMERATED {v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
    -- Unit subframe
MACdPDU-Size-Indexlist ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem
MACdPDU-Size-IndexItem ::= SEQUENCE {
                                     MACdPDU-Size,
   macdPDU-Size
                                     iE-Extensions
                                                                                                               OPTIONAL,
MACdPDU-Size-IndexItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MACdPDU-Size-Indexlist-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
```

```
sID
                                        SID,
    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,...,16777216..256000000)
MACeReset-Indicator ::= ENUMERATED {mACeReset}
MAChsGuaranteedBitRate ::= INTEGER (0..16777215,...,16777216..256000000)
MAChsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)
-- Unit kBytes
                        ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,...}
MAC-hsWindowSize
-- For 1.28Mcps TDD when TSN length is configured to 9bits, ENUMERATED (32, 64, 96, 128, 160, 192, 256,...)
MAChsResetScheme ::= ENUMERATED {
    always,
    interNodeB-change
MaximumDL-PowerCapability ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB
Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(1..maxNrOfBits-MACe-PDU-non-scheduled)
Max-EDCH-Resource-Allocation-for-CCCH ::= ENUMERATED {v8, v12, v16, v24, v32, v40, v80, v120,...}
Max-Period-for-Collistion-Resolution ::= INTEGER(8..24,...)
Max-TB-Size ::= SEQUENCE {
    maximum-TB-Size-cell-edge-users
                                        INTEGER (0..5000,...),
    maximum-TB-Size-other-users
                                        INTEGER (0..5000,...),
    iE-Extensions
                                        ProtocolExtensionContainer { {Max-TB-Size-ExtIEs} } OPTIONAL,
Max-TB-Size-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Maximum-Number-of-Retransmissions-For-E-DCH ::= INTEGER (0..15)
Maximum-Target-ReceivedTotalWideBandPower-LCR ::= INTEGER (0..621)
-- mapping as for RTWP measurement value, as specified in [23]
```

```
MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range OdBm .. 50dBm, Step +0.1dB
MaxNrOfUL-DPDCHs ::= INTEGER (1..6)
MaxPRACH-MidambleShifts ::= ENUMERATED {
    shift4,
    shift8.
    shift16
Max-Set-E-DPDCHs ::= ENUMERATED {
    vN256, vN128, vN64, vN32, vN16, vN8, vN4, v2xN4, v2xN2, v2xN2plus2xN4,
    v2xM2plus2xM4
-- Values related to [8]
Max-UE-DTX-Cycle ::= ENUMERATED {
    v5, v10, v20, v40, v64, v80, v128, v160,
    . . .
MBMS-Capability ::= ENUMERATED{
   mbms-capable,
   mbms-non-capable
MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement
MeasurementID ::= INTEGER (0..1048575)
Measurement-Power-Offset ::= INTEGER(-12 .. 26)
-- Actual value = IE value * 0.5
MeasurementRecoveryBehavior ::= NULL
MeasurementRecoveryReportingIndicator ::= NULL
MeasurementRecoverySupportIndicator ::= NULL
MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
    SEQUENCE {
        iE-ID
                                ProtocolIE-ID,
        repetitionNumber
                                RepetitionNumber1
                                                        OPTIONAL,
                                ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
        iE-Extensions
```

```
MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MICH-CFN ::= INTEGER (0..4095)
MICH-Mode ::= ENUMERATED {
   v18,
    v36,
   v72,
    v144,
    . . . ,
   v16,
    v32,
    v64,
    v128
                              ENUMERATED {v2, v4, v6, v8, v10, v12, v14, v16, ...}
MidambleConfigurationLCR ::=
MidambleConfigurationBurstType1And3 ::=
                                         ENUMERATED {v4, v8, v16}
MidambleConfigurationBurstType2 ::=
                                      ENUMERATED {v3, v6}
MidambleShiftAndBurstType ::=
                                  CHOICE {
                                      SEQUENCE {
       midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
       midambleAllocationMode
                                         CHOICE {
           defaultMidamble
                                             NULL,
           commonMidamble
                                             NULL,
           ueSpecificMidamble
                                             MidambleShiftLong,
    type2
                                      SEQUENCE {
       midambleConfigurationBurstType2
                                         MidambleConfigurationBurstType2,
       midambleAllocationMode
                                         CHOICE {
           defaultMidamble
                                             NULL,
           commonMidamble
                                             NULL,
                                             MidambleShiftShort,
           ueSpecificMidamble
       . . .
                                      SEQUENCE
       midambleAllocationMode
                                         CHOICE {
           defaultMidamble
           ueSpecificMidamble
                                             MidambleShiftLong,
       },
       . . .
```

```
MidambleShiftLong ::=
                                  INTEGER (0..15)
MidambleShiftShort ::=
                                  INTEGER (0..5)
MidambleShiftLCR ::= SEQUENCE {
   midambleAllocationMode
                              MidambleAllocationMode,
   midambleShift
                              MidambleShiftLong
                                                     OPTIONAL,
    -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
    midambleConfigurationLCR
                                  MidambleConfigurationLCR,
   iE-Extensions
                              ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }
                                                                                           OPTIONAL,
MidambleAllocationMode ::= ENUMERATED {
   defaultMidamble,
   commonMidamble,
   uESpecificMidamble,
MidambleShiftLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
MidambleShiftAndBurstType768 ::=
                                      CHOICE {
                                      SEQUENCE
   type1
       midambleConfigurationBurstType1And3
                                             MidambleConfigurationBurstType1And3,
       midambleAllocationMode
                                          CHOICE
           defaultMidamble
                                             NULL,
           commonMidamble
                                             NULL,
                                             MidambleShiftLong,
           ueSpecificMidamble
    type2
       midambleConfigurationBurstType2-768
                                             MidambleConfigurationBurstType2-768,
       midambleAllocationMode
                                          CHOICE {
           defaultMidamble
                                             NULL,
           commonMidamble
                                             NULL,
           ueSpecificMidamble
                                             MidambleShiftShort768,
                                      SEQUENCE ·
       midambleAllocationMode
                                      CHOICE {
           defaultMidamble
                                             NULL,
           ueSpecificMidamble
                                             MidambleShiftLong,
```

```
. . .
                                            ENUMERATED {v4, v8}
MidambleConfigurationBurstType2-768 ::=
MidambleShiftShort768 ::=
                                        INTEGER (0..7)
MIMO-ActivationIndicator ::= NULL
MIMO-Capability ::= ENUMERATED {
    mimo-capable,
    mimo-non-capable
MIMO-Mode-Indicator ::= ENUMERATED {
    activate.
    deactivate
MIMO-N-M-Ratio ::= ENUMERATED {v1-2, v2-3, v3-4, v4-5, v5-6, v6-7, v7-8, v8-9, v9-10, v1-1,...}
MIMO-PilotConfiguration ::= CHOICE {
    primary-and-secondary-CPICH
                                            CommonPhysicalChannelID,
    normal-and-diversity-primary-CPICH
MinimumDL-PowerCapability ::= INTEGER(0..800)
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB
MinimumReducedE-DPDCH-GainFactor ::= ENUMERATED {m8-15, m11-15, m15-15, m21-15, m30-15, m42-15, m60-15, m84-15,...}
MinSpreadingFactor ::= ENUMERATED {
       v4,
        v8,
        v16,
        v32,
        v64,
        v128,
        v256,
        v512
-- TDD Mapping scheme for the minimum spreading factor 1 and 2: "256" means 1, "512" means 2
Modification-Period ::= ENUMERATED { v1280, v2560, v5120, v10240,...}
ModifyPriorityQueue ::= CHOICE {
    addPriorityQueue
                                PriorityQueue-InfoItem-to-Add,
    modifyPriorityQueue
                                PriorityQueue-InfoItem-to-Modify,
```

```
deletePriorityQueue
                                 PriorityQueue-Id,
Modulation ::= ENUMERATED {
    aPSK,
    eightPSK,
    -- 8PSK denotes 16QAM for S-CCPCH
MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    . . .
MultiplexingPosition ::= ENUMERATED {
    fixed.
    flexible
MAChs-ResetIndicator ::= ENUMERATED{
    mAChs-NotReset
ModulationMBSFN ::= ENUMERATED {
    qPSK,
    sixteenQAM,
    . . .
MBSFN-CPICH-secondary-CCPCH-power-offset ::= INTEGER(-11..4,...)
-- Unit dB, Step 1 dB, Range -11..4 dB.
ModulationPO-MBSFN ::= CHOICE {
    qPSK
                        NULL,
    sixteenQAM
                        MBSFN-CPICH-secondary-CCPCH-power-offset,
MBSFN-Only-Mode-Indicator ::= ENUMERATED {
    mBSFN-Only-Mode
MBSFN-Only-Mode-Capability ::= ENUMERATED {
    mBSFN-Only-Mode-capable,
    mBSFN-Only-Mode-non-capable
```

```
Multicarrier-Number ::= INTEGER (1..maxHSDPAFrequency)
MultipleFreg-HSPDSCH-InformationList-ResponseTDDLCR ::= SEQUENCE (SIZE (1.. maxHSDPAFrequency-1)) OF MultipleFreg-HSPDSCH-InformationItem-
ResponseTDDLCR
--Includes the 2nd through the max number of frequency repetitions.
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR ::= SEQUENCE{
   hsSCCH-Specific-Information-ResponseTDDLCR
                                               HSSCCH-Specific-InformationRespListTDDLCR
   hARQ-MemoryPartitioning
                                               HARQ-MemoryPartitioning
                                                                                        OPTIONAL,
                                               UARFCN, -- This is the UARFCN for the second and beyond Frequency repetition.
   uARFCN
   iE-Extensions
                                               ProtocolExtensionContainer { { MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs } }
       OPTIONAL,
   . . .
MultipleFreg-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Multi-Cell-Capability ::= ENUMERATED {
   multi-Cell-Capable,
   multi-Cell-non-Capable
Multi-Cell-Capability-Info::= SEQUENCE {
   multi-Cell-Capability
                                                          Multi-Cell-Capability,
   possible-Secondary-Serving-Cell-List
                                                          Possible-Secondary-Serving-Cell-List
                                                                                               OPTIONAL,
   iE-Extensions
                             OPTIONAL,
Multi-Cell-Capability-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- ------
-- -----
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
```

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```
NRepetitionsPerCyclePeriod ::= INTEGER (2..10)
N-INSYNC-IND ::= INTEGER (1..256)
N-OUTSYNC-IND ::= INTEGER (1...256)
N-PROTECT ::= INTEGER(0...7)
NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
        CHOICE {
                neighbouringFDDCellMeasurementInformation
                                                                NeighbouringFDDCellMeasurementInformation, -- FDD only
                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
    { ID id-neighbouringTDDCellMeasurementInformation768
                                                            CRITICALITY reject TYPE NeighbouringTDDCellMeasurementInformation768 PRESENCE
mandatory }, -- Applicable to 7.68Mcps TDD only
NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
                                        PrimaryScramblingCode,
    primaryScramblingCode
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    . . .
NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
                                        TimeSlot
                                                                        OPTIONAL,
    timeSlot
    midambleShiftAndBurstType
                                        MidambleShiftAndBurstType
                                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN.
    cellParameterID
                                        CellParameterID,
    timeSlotLCR
                                        TimeSlotLCR
                                                                 OPTIONAL,
    midambleShiftLCR
                                        MidambleShiftLCR
                                                                 OPTIONAL,
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs} } OPTIONAL,
    iE-Extensions
NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation768 ::= SEQUENCE {
    uC-Id
                                        UC-Id,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
    timeSlot
                                        TimeSlot
                                                                         OPTIONAL,
    midambleShiftAndBurstType768
                                        MidambleShiftAndBurstType768
                                                                             OPTIONAL,
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformation768Item-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
NeighbouringTDDCellMeasurementInformation768Item-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,...)
Number-of-PCCH-transmission ::= INTEGER (1..5)
NSubCyclesPerCyclePeriod ::= INTEGER (1..16,...)
N-E-UCCH ::= INTEGER (1..12)
N-E-UCCHLCR ::= INTEGER (1..8)
```

```
Number-Of-Supported-Carriers ::= ENUMERATED {
   one-one-carrier,
   one-three-carrier.
   three-three-carrier,
   one-six-carrier,
   three-six-carrier,
   six-six-carrier,
NumHS-SCCH-Codes ::= INTEGER (1..maxNrOfHSSCCHCodes)
NoOfTargetCellHS-SCCH-Order::= INTEGER (1..30)
-- -----
-- -----
-- -----
-- -----
PagingIndicatorLength ::= ENUMERATED {
   v2.
   v4,
   v8,
   . . .
Paging-MACFlow-ID ::= INTEGER (0..maxNrOfPagingMACFlow-1)
PayloadCRC-PresenceIndicator ::= ENUMERATED {
   cRC-Included,
   cRC-NotIncluded,
PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
PDSCH-ID ::= INTEGER (0..255)
PDSCH-ID768 ::= INTEGER (0..511)
PDSCHSet-ID ::= INTEGER (0..255)
PICH-Mode ::= ENUMERATED {
   v18,
   v36,
   v72,
```

```
v144.
PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB
Paging-MACFlows-to-DeleteFDD ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MACFlows-to-DeleteFDD-Item
Paging-MACFlows-to-DeleteFDD-Item ::= SEQUENCE {
   paging-MACFlow-ID
                                                  Paging-MACFlow-ID,
                                                  ProtocolExtensionContainer { { Paging-MACFlows-to-DeleteFDD-Item-ExtIEs} }
   iE-Extensions
   OPTIONAL.
Paging-MACFlows-to-DeleteFDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Paging-MACFlow-Specific-Information ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MAC-Flow-Specific-Information-Item
Paging-MAC-Flow-Specific-Information-Item ::= SEQUENCE {
   paging-MACFlow-Id
                                                  Paging-MACFlow-ID,
   hSDPA-associated-PICH-Info
                                                  HSDPA-Associated-PICH-Information,
   bindingID
                                                  BindingID
                                                                                             OPTIONAL,
    transportLayerAddress
                                                  TransportLayerAddress
                                                                                             OPTIONAL,
    tnl-gos
                                                  Tnl0os
                                                                                             OPTIONAL,
    toAWS
                                                  ToAWS,
                                                  ToAWE,
    paging-MACFlow-PriorityQueue-Information
                                                  Paging-MACFlow-PriorityQueue-Information
                                                                                             OPTIONAL,
    iE-Extensions
                                                  ProtocolExtensionContainer { { Paging-MAC-Flow-Specific-Information-Item-ExtIEs } }
   OPTIONAL,
    . . .
Paging-MAC-Flow-Specific-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TransportBearerRequestIndicator
                                              CRITICALITY ignore EXTENSION TransportBearerRequestIndicator
                                                                                                                PRESENCE optional },
-- This IE should not be contained if the MAC flow is setup in procedure, and it should be contained if the MAC flow is modified in procedure.
    . . .
Paging-MACFlow-PriorityQueue-Information ::= SEQUENCE (SIZE (1..maxNrOfpagingMACQueues)) OF Paging-MACFlow-PriorityQueue-Item
Paging-MACFlow-PriorityQueue-Item ::= SEQUENCE {
   priority-Queue-Information-for-Enhanced-PCH
                                                  Priority-Queue-Information-for-Enhanced-FACH-PCH,
       iE-Extensions
                                                      OPTIONAL,
Paging-MACFlow-PriorityQueue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PLCCHsequenceNumber ::= INTEGER (0..14)
PLCCHinformation ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    sequenceNumber
                                            PLCCHsequenceNumber,
                                            ProtocolExtensionContainer { { PLCCHinformation-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
PLCCHinformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Possible-Secondary-Serving-Cell-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Possible-Secondary-Serving-Cell
Possible-Secondary-Serving-Cell ::= SEQUENCE {
    local-Cell-ID
                                Local-Cell-ID,
                                ProtocolExtensionContainer { { Possible-Secondary-Serving-Cell-ExtIEs } }
    iE-Extensions
                                                                                                                  OPTIONAL,
Possible-Secondary-Serving-Cell-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
PowerOffset ::= INTEGER (0..24)
-- PowerOffset = offset * 0.25
-- Unit dB, Range 0dB .. +6dB, Step +0.25dB
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
Priority-Queue-Information-for-Enhanced-FACH-PCH ::= SEQUENCE {
```

```
priorityQueue-Id
                                       PriorityQueue-Id,
    schedulingPriorityIndicator
                                       SchedulingPriorityIndicator,
   mAC-ehs-Reset-Timer
                                       MAC-ehs-Reset-Timer,
    -- shall be ignored in case of Enhanced PCH
   discardTimer
                                       DiscardTimer
                                                                              OPTIONAL,
   mAC-hsWindowSize
                                       MAC-hsWindowSize,
   maximum-MACcPDU-Size
                                       MAC-PDU-SizeExtended,
   iE-Extensions
                                       ProtocolExtensionContainer { { Priority-Queue-Information-for-Enhanced-FACH-PCH-ExtIEs } }
                                                                                                                                     OPTIONAL,
Priority-Queue-Information-for-Enhanced-FACH-PCH-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PriorityOueue-Id ::= INTEGER (0..maxNrOfPriorityOueues-1)
PriorityOueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPriorityOueues)) OF PriorityOueue-InfoItem
PriorityQueue-InfoItem ::= SEQUENCE {
   priorityQueueId
                                       PriorityQueue-Id,
   associatedHSDSCH-MACdFlow
                                       HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                       SchedulingPriorityIndicator,
   discardTimer
                                       DiscardTimer
                                                                  OPTIONAL,
   mAC-hsWindowSize
                                       MAC-hsWindowSize,
   mAChsGuaranteedBitRate
                                       MAChsGuaranteedBitRate
                                                                                                                 OPTIONAL,
   macdPDU-Size-Index
                                       MACdPDU-Size-Indexlist,
   rLC-Mode
                                       RLC-Mode,
                                       ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs} }
   iE-Extensions
                                                                                                                   OPTIONAL,
PriorityQueue-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-MaximumMACdPDU-SizeExtended
                                          CRITICALITY reject
                                                                  EXTENSION
                                                                             MAC-PDU-SizeExtended
                                                                                                                 PRESENCE optional },
PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF ModifyPriorityQueue
PriorityQueue-InfoItem-to-Add ::= SEQUENCE {
   priorityQueueId
                                       PriorityQueue-Id,
   associatedHSDSCH-MACdFlow
                                       HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                       SchedulingPrioritvIndicator,
   discardTimer
                                       DiscardTimer
                                                                                                  OPTIONAL.
   mAC-hsWindowSize
                                       MAC-hsWindowSize,
   mAChsGuaranteedBitRate
                                       MAChsGuaranteedBitRate
                                                                                                  OPTIONAL.
   macdPDU-Size-Index
                                       MACdPDU-Size-Indexlist,
   rLC-Mode
                                       RLC-Mode,
   iE-Extensions
                                       OPTIONAL,
```

```
PriorityOueue-InfoItem-to-Add-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MaximumMACdPDU-SizeExtended
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 MAC-PDU-SizeExtended
                                                                                                                      PRESENCE optional },
PriorityQueue-InfoItem-to-Modify ::= SEQUENCE {
    prioritvOueueId
                                         PriorityOueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                                                      OPTIONAL,
                                                                                                                      OPTIONAL,
    discardTimer
                                        DiscardTimer
                                                                                                                      OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize
                                                                                                                      OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                                                      OPTIONAL,
    macdPDU-Size-Index-to-Modify
                                        MACdPDU-Size-Indexlist-to-Modify
                                                                                                                      OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-ExtIEs} } }
                                                                                                                        OPTIONAL,
PriorityOueue-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
    { ID id-MaximumMACdPDU-SizeExtended
                                                                                                                      PRESENCE optional },
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 MAC-PDU-SizeExtended
    . . .
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 { { PriorityQueue-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
PRXdes-base ::= INTEGER (-112..-50)
-- Unit: dBm, step size 1
SCH-TimeSlot ::= INTEGER (0..6)
```

```
PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%
-- 0 is not applicable for E-DPCH
PUSCH-ID ::= INTEGER (0..255)
PUSCHSet-ID ::= INTEGER (0..255)
Paging-MACFlow-Specific-InformationLCR ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MAC-Flow-Specific-Information-ItemLCR
Paging-MAC-Flow-Specific-Information-ItemLCR ::= SEQUENCE
                                                 Paging-MACFlow-ID,
   paging-MACFlow-Id
   hSDPA-associated-PICH-InfoLCR
                                                 HSDPA-Associated-PICH-InformationLCR
                                                                                           OPTIONAL,
   bindingID
                                                 BindingID
                                                                                           OPTIONAL,
   transportLayerAddress
                                                 TransportLayerAddress
                                                                                           OPTIONAL,
    tnl-gos
                                                 TnlOos
                                                                                           OPTIONAL,
    toAWS
                                                 ToAWS
                                                                                           OPTIONAL,
    toAWE
                                                 ToAWE
                                                                                           OPTIONAL,
   paging-MACFlow-PriorityQueue-InformationLCR
                                                 Paging-MACFlow-PriorityOueue-Information
                                                                                           OPTIONAL,
   transportBearerRequestIndicator
                                                 TransportBearerRequestIndicator
                                                                                           OPTIONAL,
   iE-Extensions
                                                 ProtocolExtensionContainer { { Paging-MAC-Flow-Specific-Information-ItemLCR-ExtIEs } }
   OPTIONAL,
    . . .
Paging-MAC-Flow-Specific-Information-ItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Paging-MACFlows-to-DeleteLCR ::= SEQUENCE (SIZE (1.. maxNrOfPagingMACFlow)) OF Paging-MACFlows-to-DeleteLCR-Item
Paging-MACFlows-to-DeleteLCR-Item ::= SEQUENCE {
   paging-MACFlow-ID
                                                 Paging-MACFlow-ID,
   iE-Extensions
                                                 ProtocolExtensionContainer { { Paging-MACFlows-to-DeleteLCR-Item-ExtIEs} }
   OPTIONAL,
    . . .
Paging-MACFlows-to-DeleteLCR-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- ------
__ ________
QE-Selector ::= ENUMERATED {
   selected,
   non-selected
-- -----
```

```
RACH-Measurement-Result ::= ENUMERATED {
   cpich-EcNo,
   cpich-RSCP,
   pathloss,
RACH-SlotFormat ::= ENUMERATED {
   v0,
   v1,
   v2,
   v3,
RACH-SubChannelNumbers ::= BIT STRING
                                    subCh11(0),
                                   subCh10(1),
                                   subCh9(2),
                                   subCh8(3),
                                   subCh7(4),
                                   subCh6(5),
                                   subCh5(6),
                                    subCh4(7),
                                   subCh3(8),
                                    subCh2(9),
                                    subCh1(10),
                                    subCh0(11)
                                    } (SIZE (12))
RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item
RL-Specific-DCH-Info-Item ::= SEQUENCE {
   dCH-id
                         DCH-ID.
   bindingID
                         BindingID
                                                                                      OPTIONAL,
   transportlayeraddress
                        TransportLayerAddress
                                                                                      OPTIONAL,
   iE-Extensions
                         ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs} }
                                                                                      OPTIONAL,
   . . .
RL-Specific-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    FDD only
RL-Specific-E-DCH-Info ::= SEQUENCE {
   rL-Specific-E-DCH-Information
                                   RL-Specific-E-DCH-Information,
   e-AGCH-PowerOffset
                                   E-AGCH-PowerOffset
                                                                           OPTIONAL,
   e-RGCH-PowerOffset
                                   E-RGCH-PowerOffset
                                                                           OPTIONAL,
   e-HICH-PowerOffset
                                   E-HICH-PowerOffset
                                                                           OPTIONAL,
   iE-Extensions
                         ProtocolExtensionContainer { { RL-Specific-E-DCH-Info-Item-ExtIEs} } OPTIONAL,
```

```
RL-Specific-E-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Specific-E-DCH-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF RL-Specific-E-DCH-Information-Item
RL-Specific-E-DCH-Information-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                           E-DCH-MACdFlow-ID,
    bindingID
                           BindingID
                                                                        OPTIONAL.
    transportlayeraddress TransportLayerAddress
                                                                        OPTIONAL,
    iE-Extensions
                           ProtocolExtensionContainer { { RL-Specific-E-DCH-Information-Item-ExtIEs} } OPTIONAL,
RL-Specific-E-DCH-Information-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
Reference-ReceivedTotalWideBandPower ::= INTEGER (0..621)
-- mapping as for RTWP measurement value, as specified in [22]
Reference-ReceivedTotalWideBandPowerReporting::= ENUMERATED {
    reference-ReceivedTotalWideBandPower-Requested
Reference-ReceivedTotalWideBandPowerSupportIndicator::= ENUMERATED {
    indication-of-Reference-ReceivedTotalWideBandPower-supported
ReferenceClockAvailability ::= ENUMERATED {
    available,
    notAvailable
ReferenceSFNoffset ::= INTEGER (0..255)
Reference-E-TFCI-Information ::= SEOUENCE (SIZE (1..maxNrOfRefETFCIs)) OF Reference-E-TFCI-Information-Item
Reference-E-TFCI-Information-Item ::= SEOUENCE {
    reference-E-TFCI
    -- The following IE shall be ignored if id-Ext-Reference-E-TFCI-PO is present in Reference-E-TFCI-Information-Item-ExtIEs
    reference-E-TFCI-PO
                                   Reference-E-TFCI-PO,
                                    ProtocolExtensionContainer { { Reference-E-TFCI-Information-Item-ExtIEs} }
    iE-Extensions
                                                                                                                    OPTIONAL,
    . . .
```

```
Reference-E-TFCI-Information-Item-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the ref E-TFCI power offset to be signalled exceeds maxNrOfRefETFCI-PO-OUANTSTEPs
   { ID id-Ext-Reference-E-TFCI-PO
                                      CRITICALITY reject
                                                             EXTENSION Ext-Reference-E-TFCI-PO
                                                                                                                  PRESENCE optional },
Reference-E-TFCI-PO ::= INTEGER (0.. maxNrOfRefETFCI-PO-QUANTSTEPs)
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
   periodic
                       ReportCharacteristicsType-ReportPeriodicity,
   event-a
                       ReportCharacteristicsType-EventA,
                       ReportCharacteristicsType-EventB,
    event-b
                       ReportCharacteristicsType-EventC,
    event-c
                       ReportCharacteristicsType-EventD,
   event-d
    event-e
                       ReportCharacteristicsType-EventE,
    event-f
                       ReportCharacteristicsType-EventF,
    extension-ReportCharacteristics
                                      Extension-ReportCharacteristics
Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
Extension-ReportCharacteristicsIE NBAP-PROTOCOL-IES ::= {
    { ID id-ReportCharacteristicsType-OnModification
                                                    CRITICALITY reject TYPE ReportCharacteristicsType-OnModification PRESENCE mandatory }
ReportCharacteristicsType-EventA ::= SEQUENCE {
   measurementThreshold
                                   ReportCharacteristicsType-MeasurementThreshold,
                                  ReportCharacteristicsType-ScaledMeasurementHysteresisTime
   measurementHvsteresisTime
                                                                                                                  OPTIONAL,
                                  iE-Extensions
                                                                                                                  OPTIONAL,
ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
ReportCharacteristicsType-EventB ::= SEQUENCE {
   measurement.Threshold
                                   ReportCharacteristicsType-MeasurementThreshold,
   measurementHysteresisTime
                                   ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                                    OPTIONAL,
                                   ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventC ::= SEQUENCE {
   measurementIncreaseThreshold
                                   ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
   measurementChangeTime
                                   ReportCharacteristicsType-ScaledMeasurementChangeTime,
                                   iE-Extensions
                                                                                                                    OPTIONAL,
    . . .
ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold
                                   ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
   measurementChangeTime
                                   ReportCharacteristicsType-ScaledMeasurementChangeTime,
   iE-Extensions
                                   ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs} } 
                                                                                                                    OPTIONAL,
ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventE ::= SEQUENCE {
   measurementThreshold1
                                   ReportCharacteristicsType-MeasurementThreshold,
   measurementThreshold2
                                   ReportCharacteristicsType-MeasurementThreshold
                                                                                              OPTIONAL,
   measurementHysteresisTime
                                   ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                              OPTIONAL,
    reportPeriodicity
                                   ReportCharacteristicsType-ReportPeriodicity
                                                                                              OPTIONAL.
                                   ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventF ::= SEQUENCE {
   measurementThreshold1
                                   ReportCharacteristicsType-MeasurementThreshold,
   measurementThreshold2
                                   ReportCharacteristicsType-MeasurementThreshold
                                                                                              OPTIONAL,
   measurementHysteresisTime
                                   ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                              OPTIONAL,
    reportPeriodicity
                                   ReportCharacteristicsType-ReportPeriodicity
                                                                                              OPTIONAL,
```

```
ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-OnModification ::= SEQUENCE
    measurementThreshold
                                    ReportCharacteristicsType-MeasurementThreshold,
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
        . . .
ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    received-total-wide-band-power
                                                            Received-total-wide-band-power-Value-IncrDecrThres,
    transmitted-carrier-power
                                    Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles
                                            Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP
                                    UL-TimeslotISCP-Value-IncrDecrThres,
    sir
                                SIR-Value-IncrDecrThres,
                                SIR-Error-Value-IncrDecrThres.
    sir-error
    transmitted-code-power
                                    Transmitted-Code-Power-Value-IncrDecrThres,
                                    RSCP-Value-IncrDecrThres,
    round-trip-time
                                    Round-Trip-Time-IncrDecrThres,
    notUsed-1-acknowledged-PCPCH-access-preambles
                                                        NULL,
    notUsed-2-detected-PCPCH-access-preambles
                                                        NULL,
    {\tt extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold}
                                                                                    Extension-ReportCharacteristicsType-
MeasurementIncreaseDecreaseThreshold
Extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementIncreaseDecreaseThresholdIE }}
Extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThresholdIE NBAP-PROTOCOL-IES ::=
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission
                                                                            CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue PRESENCE mandatory}
 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
mandatory } |
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortion
                                                                                                                    CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue
                                                                    PRESENCE mandatory } |
 ID id-UpPTSInterferenceValue
                                    CRITICALITY reject TYPE
                                                                UpPTSInterferenceValue
                                                                                                                       PRESENCE mandatory
 ID id-Received-Scheduled-EDCH-Power-Share
                                                CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
                                                                                                                       PRESENCE mandatory
  ID id-Received-Scheduled-EDCH-Power-Share-For-CellPortion CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
                                                                                                                       PRESENCE mandatory
 ID id-EDCH-RACH-Report-IncrDecrThres
                                                            CRITICALITY ignore TYPE EDCH-RACH-Report-IncrDecrThres
                                                                                                                       PRESENCE mandatory
    -- FDD only
EDCH-RACH-Report-IncrDecrThres ::= SEQUENCE
```

```
denied-EDCH-RACH-resources
                                    Denied-EDCH-RACH-Resources-Value,
    iE-Extensions
                        ProtocolExtensionContainer { { EDCH-RACH-Report-IncrDecrThres-ExtIEs } } OPTIONAL,
        . . .
EDCH-RACH-Report-IncrDecrThres-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Granted-EDCH-RACH-Resources-Value ::= INTEGER(0..240,...)
-- According to mapping in [25].
Denied-EDCH-RACH-Resources-Value ::= INTEGER(0..240,...)
-- According to mapping in [25].
ReportCharacteristicsType-MeasurementThreshold ::= CHOICE
    received-total-wide-band-power
                                                            Received-total-wide-band-power-Value,
    transmitted-carrier-power
                                    Transmitted-Carrier-Power-Value,
    acknowledged-prach-preambles
                                            Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP
                                    UL-TimeslotISCP-Value.
    sir
                                STR-Value.
                                SIR-Error-Value,
    sir-error
    transmitted-code-power
                                    Transmitted-Code-Power-Value,
                                    RSCP-Value,
    rx-timing-deviation
                                    Rx-Timing-Deviation-Value,
    round-trip-time
                                    Round-Trip-Time-Value,
    notUsed-1-acknowledged-PCPCH-access-preambles
                                                        NULL,
    notUsed-2-detected-PCPCH-access-preambles
                                                        NULL.
    extension-ReportCharacteristicsType-MeasurementThreshold
                                                                    Extension-ReportCharacteristicsType-MeasurementThreshold
Extension-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
                                                        CRITICALITY reject TYPE SFNSFNMeasurementThresholdInformation
                                                                                                                             PRESENCE mandatory }
      ID id-Rx-Timing-Deviation-Value-LCR
                                                        CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR
                                                                                                                             PRESENCE mandatory }
     ID id-HS-SICH-Reception-Ouality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Ouality-Measurement-Value PRESENCE mandatory
    -- For 1.28Mcps TDD, used when the Measurement Threshold Value for HS-SICH Reception Quality are less than or equal to 20
    { ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission CRITICALITY reject
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue PRESENCE mandatory}
      ID id-HS-DSCHRequiredPowerValue
                                                        CRITICALITY reject TYPE HS-DSCHRequiredPowerValue
                                                                                                                             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
                                                                                                                             PRESENCE mandatory }
      ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortion
                                                                                                                        CRITICALITY reject TYPE
{\tt Transmitted Carrier Power Of All Codes Not Used For HST ransmission Value}
                                                                    PRESENCE mandatory } |
      ID id-UpPTSInterferenceValue
                                                        CRITICALITY reject TYPE UppTSInterferenceValue
                                                                                                                              PRESENCE mandatory }
                                                                                                                             PRESENCE mandatory }
      ID id-DLTransmissionBranchLoadValue
                                                        CRITICALITY reject TYPE DLTransmissionBranchLoadValue
      ID id-HS-DSCHRequiredPowerValue-For-Cell-Portion CRITICALITY reject TYPE HS-DSCHRequiredPowerValue
                                                                                                                             PRESENCE mandatory }
      ID id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue
                                                                    CRITICALITY reject TYPE E-DCH-Non-serving-Relative-Grant-Down-Commands
    PRESENCE mandatory } |
    { ID id-Rx-Timing-Deviation-Value-768
                                                        CRITICALITY reject TYPE Rx-Timing-Deviation-Value-768
                                                                                                                             PRESENCE mandatory } |
```

PRESENCE mandatory }

PRESENCE mandatory }

PRESENCE mandatory }

PRESENCE mandatory

PRESENCE mandatory

```
ID id-Rx-Timing-Deviation-Value-384-ext
                                                      CRITICALITY reject TYPE Rx-Timing-Deviation-Value-384-ext
     ID id-Extended-Round-Trip-Time-Value
                                                          CRITICALITY reject TYPE Extended-Round-Trip-Time-Value
     ID id-Received-Scheduled-EDCH-Power-Share
                                                             CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
     ID id-Received-Scheduled-EDCH-Power-Share-For-CellPortion CRITICALITY reject TYPE RSEPS-Value-IncrDecrThres
     ID id-Additional-HS-SICH-Reception-Ouality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Ouality-Measurement-Value
    PRESENCE mandatory \ |
    -- Applicable to 1.28Mcps TDD only, used when the Measurement Threshold Value for HS-SICH Reception Quality are more than 20, Measurement
Threshold Value = 20 + IE Value
     ID id-TUTRANGANSSMeasurementThresholdInformation CRITICALITY reject TYPE TUTRANGANSSMeasurementThresholdInformation PRESENCE mandatory }
     ID id-EDCH-RACH-Report-ThresholdInformation
                                                      CRITICALITY ignore TYPE EDCH-RACH-Report-ThresholdInformation
    -- FDD only
EDCH-RACH-Report-ThresholdInformation ::= SEQUENCE
    denied-EDCH-RACH-resources
                                  Denied-EDCH-RACH-Resources-Value,
    iE-Extensions
                       . . .
EDCH-RACH-Report-ThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE
                       MeasurementChangeTime-Scaledmsec,
    . . .
MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
                       MeasurementHysteresisTime-Scaledmsec,
    msec
    . . .
MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms
ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
                       ReportPeriodicity-Scaledmsec,
   msec
   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-TD
                       ::= INTEGER (0..4095)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Received-total-wide-band-power-For-
CellPortion-Value-Item
Received-total-wide-band-power-For-CellPortion-Value-Item ::= SEQUENCE{
    cellPortionID
                                            CellPortionID,
    received-total-wide-band-power-value
                                            Received-total-wide-band-power-Value,
                                            ProtocolExtensionContainer { { Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIEs} }
   iE-Extensions
   OPTIONAL,
Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]
Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)
Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Received-Scheduled-EDCH-Power-
Share-For-CellPortion-Value-Item
Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value-Item ::= SEQUENCE{
```

```
CellPortionID,
    cellPortionID
    received-Scheduled-power-share-value
                                            RSEPS-Value.
    received-total-wide-band-power-value
                                            Received-total-wide-band-power-Value
                                                                                         OPTIONAL.
    iE-Extensions
                                            ProtocolExtensionContainer { { Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value-Item-ExtIEs} }
       OPTIONAL.
    . . .
Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Received-Scheduled-EDCH-Power-Share-Value ::= SEQUENCE{
    received-Scheduled-power-share-value
                                            RSEPS-Value,
    received-total-wide-band-power-value
                                            Received-total-wide-band-power-Value
                                                                                         OPTIONAL,
RSEPS-Value-IncrDecrThres ::= INTEGER (0..151)
RSEPS-Value ::= INTEGER (0..151)
-- According to mapping in [22]
RequestedDataValueInformation ::= CHOICE {
    informationAvailable
                                InformationAvailable,
    informationnotAvailable
                                InformationnotAvailable
InformationAvailable::= SEQUENCE {
    requesteddataValue
                            RequestedDataValue,
    ie-Extensions
                            ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs} }
                                                                                                                      OPTIONAL,
InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
InformationnotAvailable ::= NULL
RequestedDataValue ::= SEQUENCE {
    dqps-corrections
                                                                                             OPTIONAL,
                            DGPSCorrections
    qps-navandrecovery
                            GPS-NavigationModel-and-TimeRecovery
                                                                                                 OPTIONAL,
    qps-ionos-model
                            GPS-Ionospheric-Model
                                                                                                 OPTIONAL,
    qps-utc-model
                            GPS-UTC-Model
                                                                                             OPTIONAL,
    qps-almanac
                            GPS-Almanac
                                                                                             OPTIONAL,
    gps-rt-integrity
                            GPS-RealTime-Integrity
                                                                                             OPTIONAL,
    gpsrxpos
                            GPS-RX-POS
                                                                                             OPTIONAL,
```

PRESENCE optional } |

PRESENCE optional },

```
ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }
    iE-Extensions
                                                                                       OPTIONAL,
RequestedDataValue-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-GANSS-Common-Data
                                     CRITICALITY ignore
                                                            EXTENSION GANSS-Common-Data
    { ID id-GANSS-Generic-Data
                                     CRITICALITY ignore
                                                            EXTENSION GANSS-Generic-Data
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
-- According to mapping in [23]
Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
-- According to mapping in [23]
Rx-Timing-Deviation-Value-768 ::= INTEGER (0..65535)
-- According to mapping in [23]
Rx-Timing-Deviation-Value-384-ext ::= INTEGER (0..32767)
-- According to mapping in [23]
RefBeta ::= INTEGER (-15..16)
RTWP-ReportingIndicator ::= ENUMERATED {
    rTWP-reporting-required}
RTWP-CellPortion-ReportingIndicator ::= ENUMERATED {
    rTWP-CellPortion-reporting-required}
__ ______
-- ------
                        ::= INTEGER(1..256)
AdjustmentPeriod
-- Unit Frame
E-DPCCH-Power-Boosting-Capability ::= ENUMERATED {
    e-DPCCH-Power-Boosting-capable,
    e-DPCCH-Power-Boosting-non-capable
SAT-ID ::= INTEGER (0..63)
SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item
SAT-Info-Almanac-Item ::= SEQUENCE {
    data-id
                 DATA-ID,
    sat-id
                     SAT-ID,
                    BIT STRING (SIZE (16)),
    gps-e-alm
    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-sgrt-alm
                    BIT STRING (SIZE (24)),
   omegazero-alm
                    BIT STRING (SIZE (24)),
   m-zero-alm
                    BIT STRING (SIZE (24)),
   qps-omega-alm
                    BIT STRING (SIZE (24)),
   gps-af-zero-alm BIT STRING (SIZE (11)),
   qps-af-one-alm
                    BIT STRING (SIZE (11)),
                    ie-Extensions
                                                                                 OPTIONAL.
  -- 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)),
   qps-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)),
                   BIT STRING (SIZE (11)),
   gps-af-zero-alm
   gps-af-one-alm
                    BIT STRING (SIZE (11)),
   ie-Extensions
                    OPTIONAL,
   -- Includes the GPS-Almanac-Information for 17<sup>th</sup> through 32<sup>nd</sup> 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-dgps
                                      BIT STRING (SIZE (8)),
   udre
                                      UDRE,
   prc
                                      PRC,
   range-correction-rate
                                      Range-Correction-Rate,
                                      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,
 ie-Extensions ProtocolExtensionContainer { { SAT-Info-RealTime-Integrity-Item-ExtIEs} }
                                                                                                                   OPTIONAL,
SAT-Info-RealTime-Integrity-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ScaledAdjustmentRatio
                               ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100
MaxAdjustmentStep
                          ::= INTEGER(1..10)
-- Unit Slot
SchedulingInformation
                               ::= ENUMERATED {
    included.
    not-included
SecondaryServingCells ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF SecondaryServingCellsItem
SecondaryServingCellsItem ::= SEQUENCE {
    secondaryC-ID
                               C-ID,
    numSecondaryHS-SCCH-Codes
                                   NumHS-SCCH-Codes
                                                           OPTIONAL,
    sixtyfourQAM-UsageAllowedIndicator
                                           SixtyfourQAM-UsageAllowedIndicator
                                                                                    OPTIONAL,
    iE-Extensions
                                                   ProtocolExtensionContainer { { SecondaryServingCellsItem-ExtIEs} }
                                                                                                                               OPTIONAL,
SecondaryServingCellsItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SchedulingPriorityIndicator
                                       ::= INTEGER (0..15)
                                                             -- lowest (0), highest (15)
SID ::= INTEGER (0..maxNrOfMACdPDUIndexes-1)
ScramblingCodeNumber ::= INTEGER (0..15)
Secondary-CPICH-Information-Change ::= CHOICE {
    new-secondary-CPICH
                                       CommonPhysicalChannelID,
    secondary-CPICH-shall-not-be-used NULL,
```

```
SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)
Secondary-CCPCH-SlotFormat-Extended ::= INTEGER(18..23,...)
Segment-Type ::= ENUMERATED {
        first-segment,
        first-segment-short,
        subsequent-segment,
       last-segment,
       last-segment-short,
        complete-SIB,
        complete-SIB-short,
Serving-E-DCH-RL-ID ::= CHOICE {
    serving-E-DCH-RL-in-this-NodeB
                                                Serving-E-DCH-RL-in-this-NodeB,
    serving-E-DCH-RL-not-in-this-NodeB
                                                NULL,
Serving-E-DCH-RL-in-this-NodeB ::= SEQUENCE {
    rI.-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 ::= {
SetsOfHS-SCCH-Codes ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH)) OF SetsOfHS-SCCH-CodesItem
SetsOfHS-SCCH-CodesItem ::= SEQUENCE {
   hS-SCCH-PreconfiguredCodes
                                    HS-SCCH-PreconfiguredCodes,
    sixtyfourQAM-DL-UsageIndicator
                                        SixtyfourQAM-DL-UsageIndicator
                                                                             OPTIONAL,
   hSDSCH-TBSizeTableIndicator
                                    HSDSCH-TBSizeTableIndicator
                                                                            OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { { SetsOfHS-SCCH-CodesItem-ExtIEs} } OPTIONAL,
SetsOfHS-SCCH-CodesItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFN ::= INTEGER (0..4095)
SFNSFN-FDD ::= INTEGER (0..614399)
SFNSFN-TDD ::= INTEGER (0..40961)
SFNSFN-TDD768 ::= INTEGER (0..81923)
SFNSFNChangeLimit ::= INTEGER (1..256)
```

```
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
SENSENDriftRate ::= 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 {
    successfull Neighbouring Cell SFNSFNObserved Time Difference Measurement Information
                                                                                    SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
       SEQUENCE {
           uC-Id
                                      UC-Id,
           sFNSFNValue
                                      SFNSFNValue,
           sFNSFNQuality
                                      SFNSFNQuality
                                                                 OPTIONAL,
           sFNSFNDriftRate
                                      SFNSFNDriftRate,
           sFNSFNDriftRateQuality
                                      SFNSFNDriftRateQuality
                                                                 OPTIONAL,
           sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
                              ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
           iE-Extensions
ExtIEs } }
               OPTIONAL,
    unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation
                                                                                    SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
       SEQUENCE {
           uC-Id
                                      UC-Id,
                              ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
           iE-Extensions
ExtIEs } }
               OPTIONAL,
                       OPTIONAL,
   iE-Extensions
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 {
    timeSlot
                        TimeSlot,
                                    ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} }
    iE-Extensions
                                                                                                                      OPTIONAL,
SFNSFNTimeStamp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNValue ::= CHOICE {
    sFNSFN-FDD
                    SFNSFN-FDD,
                                        --- 1.28Mcps and 3.84Mcps TDD only
    sFNSFN-TDD
                    SFNSFN-TDD,
    sFNSFN-TDD768
                    SFNSFN-TDD768
SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)
SIR-Value ::= INTEGER (0..63)
-- According to mapping in [22]/[23]
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
SignallingBearerRequestIndicator::= ENUMERATED {bearerRequested}
```

```
SixtyfourQAM-UsageAllowedIndicator ::= ENUMERATED {
    allowed,
    not-allowed
SixtyfourQAM-DL-UsageIndicator ::= ENUMERATED {
    sixtyfourQAM-DL-used,
    sixtyfourQAM-DL-not-used
SixtyfourQAM-DL-Capability ::= ENUMERATED {
    sixtyfourQAM-DL-supported,
    sixtyfourQAM-DL-not-supported
SixtyfourQAM-DL-MIMO-Combined-Capability ::= ENUMERATED {
    sixtyfourQAM-DL-MIMO-Combined-capable,
    sixtyfourQAM-DL-MIMO-Combined-non-capable
SignatureSequenceGroupIndex ::= INTEGER (0..19)
SixteenQAM-UL-Capability ::= ENUMERATED {
    sixteenQAM-UL-capable,
    sixteenQAM-UL-non-capable
SixteenQAM-UL-Operation-Indicator ::= ENUMERATED {
    activate,
    deactivate
SNPL-Reporting-Type ::= ENUMERATED {
    type1,
    type2
Soffset ::= INTEGER (0..9,...)
SpecialBurstScheduling ::= INTEGER (1..256) -- Number of frames between special burst transmission during DTX
Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    start-of-audit-sequence,
    not-start-of-audit-sequence
```

```
STTD-Indicator ::= ENUMERATED {
    active.
    inactive.
SSDT-SupportIndicator ::= ENUMERATED
    not-Used-sSDT-Supported,
    sSDT-not-supported
Sub-Frame-Number ::= INTEGER (0..4,...)
SyncCase ::= INTEGER (1..2,...)
SYNCDlCodeId ::= INTEGER (1..32,...)
SyncFrameNumber ::= INTEGER (1..10)
SynchronisationReportCharacteristics ::= SEQUENCE
    synchronisationReportCharacteristicsType
                                                SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc
                                                SynchronisationReportCharactThreExc
                                                                                        OPTIONAL,
        -- This IE shall be included if the synchronisationReportCharacteristicsType IE is set to 'thresholdExceeding'.
    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,
    iE-Extensions
                                ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } }
    . . .
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 {
                                 SyncFrameNumber,
   syncFrameNoToReceive
   syncDLCodeIdInfoLCR
                                 SyncDLCodeInfoListLCR,
                                 ProtocolExtensionContainer { { SyncDLCodeIdThreInfoList-ExtIEs } }
   iE-Extensions
                                                                                                    OPTIONAL,
SyncDLCodeIdThreInfoList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SyncDLCodeInfoListLCR ::= SEQUENCE (SIZE (1..maxNrOfSyncDLCodesLCR)) OF SyncDLCodeInfoItemLCR
SyncDLCodeInfoItemLCR ::= SEQUENCE {
                                 SYNCDlCodeId,
   syncDLCodeId
   syncDLCodeIdArrivTime
                                 CellSyncBurstTimingLCR
                                                                   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,
```

```
T1 ::= ENUMERATED \{v10, v20, v30, v40, v50, v60, v70, v80, v90, v100, v120, v140, v160, v200, v300, v400, ...\}
T321 ::= ENUMERATED {v100, v200, v400, v800, ...}
T-Cell ::= ENUMERATED {
    νO,
    v1,
    v2,
    v3,
    v4,
    v5,
    v6,
    v7,
    v8,
    v9
T-RLFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range Os .. 25.5s, Step 0.1s
T-PROTECT ::= ENUMERATED \{v40, v60, v80, v100, v120, v200, v400, ...\}
T-SYNC ::= ENUMERATED \{v40, v80, v120, v160, v200, v300, v400, v500, \ldots\}
TDD-AckNack-Power-Offset ::= INTEGER (-7..8,...)
-- Unit dB, Range -7dB .. +8dB, Step 1dB
TDD-ChannelisationCode ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1.
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3.
    chCode16div4,
    chCode16div5.
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
```

```
chCode16div13,
    chCode16div14,
    chCode16div15.
    chCode16div16,
TDD-ChannelisationCodeLCR ::= SEQUENCE {
    tDD-ChannelisationCode
                                     TDD-ChannelisationCode,
    modulation
                                     Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD or 7.68Mcps TDD
    iE-Extensions
                                             ProtocolExtensionContainer { { TDD-ChannelisationCodeLCR-ExtIEs} }
    . . .
TDD-ChannelisationCodeLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-ChannelisationCode768
                                     ::= 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,
    chCode32div1,
    chCode32div2,
    chCode32div3,
```

```
chCode32div4,
    chCode32div5,
    chCode32div6.
    chCode32div7,
    chCode32div8,
    chCode32div9,
    chCode32div10,
    chCode32div11,
    chCode32div12,
    chCode32div13,
    chCode32div14,
    chCode32div15,
    chCode32div16,
    chCode32div17,
    chCode32div18,
    chCode32div19,
    chCode32div20,
    chCode32div21,
    chCode32div22,
    chCode32div23,
    chCode32div24,
    chCode32div25,
    chCode32div26,
    chCode32div27.
    chCode32div28,
    chCode32div29,
    chCode32div30,
    chCode32div31,
    chCode32div32,
TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem
TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID
                                             DPCH-ID,
    tdd-ChannelisationCode
                                             TDD-ChannelisationCode,
    iE-Extensions
                                             ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs} }
                                                                                                                         OPTIONAL,
TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-DL-Code-LCR-InformationItem
TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID
                                             DPCH-ID,
    tdd-ChannelisationCodeLCR
                                             TDD-ChannelisationCodeLCR,
    tdd-DL-DPCH-TimeSlotFormat-LCR
                                             TDD-DL-DPCH-TimeSlotFormat-LCR,
                                             ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                            OPTIONAL,
```

```
TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-768-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs768)) OF TDD-DL-Code-768-InformationItem
TDD-DL-Code-768-InformationItem ::= SEOUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768.
    iE-Extensions
                                            ProtocolExtensionContainer { { TDD-DL-Code-768-InformationItem-ExtIEs} }
                                                                                                                          OPTIONAL,
    . . .
TDD-DL-Code-768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE
                                QPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
                                EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    -- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE denotes MBSFN S-CCPCH time slot format
QPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
-- For 1.28 Mcps TDD, if the cell is operating in MBSFN only mode, this IE denotes MBSFN S-CCPCH time slot format, INTEGER(0..11,...)
TDD-DPCHOffset ::= CHOICE {
    initialOffset
                        INTEGER (0..255),
                        INTEGER (0..63)
    noinitialOffset
TDD-PhysicalChannelOffset ::= INTEGER (0..63)
TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
TDD-TPC-UplinkStepSize-LCR ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors
                                SEQUENCE {
       gainFactor
                                    CHOICE {
```

```
fdd
                                        SEQUENCE {
                betaC
                                            BetaCD,
                betaD
                                            BetaCD.
                                    ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } }
                iE-Extensions
                                                                                                 OPTIONAL,
           tdd
                                        BetaCD,
       refTFCNumber
                                    RefTFCNumber
                                                    OPTIONAL,
                                ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } }
       iE-Extensions
                                                                                                                     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,
                                            ProtocolExtensionContainer { { TDD-UL-Code-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                        OPTIONAL,
TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem
TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    tdd-UL-DPCH-TimeSlotFormat-LCR
                                            TDD-UL-DPCH-TimeSlotFormat-LCR,
                                            ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-768-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-768-InformationItem
TDD-UL-Code-768-InformationItem ::= SEQUENCE {
```

```
dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCode768
                                            TDD-ChannelisationCode768,
   iE-Extensions
                                            ProtocolExtensionContainer { { TDD-UL-Code-768-InformationItem-ExtIEs} }
                                                                                                                          OPTIONAL.
TDD-UL-Code-768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-UL-DPCH-TimeSlotFormat-LCR ::= CHOICE
                               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,
                                NULL
                                                    OPTIONAL,
   not-Used-splitType
   not-Used-lengthOfTFCI2
                               NULL
                                                    OPTIONAL,
                                ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    not-Used-split
TGD
                    ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence
```

```
TGPRC
                    ::= INTEGER (0..511)
-- 0 = infinity
TGPSID
                    ::= INTEGER (1.. maxTGPS)
TGSN
                    ::= INTEGER (0..14)
TimeSlot ::= INTEGER (0..14)
TimeSlotDirection ::= ENUMERATED {
    ul,
    dl,
    . . .
TimeSlot-InitiatedListLCR ::= SEQUENCE (SIZE (0..6)) OF TimeSlotLCR
TimeSlotLCR ::= INTEGER (0..6)
TimeslotLCR-Extension ::= ENUMERATED {
    ts7,
    . . .
-- ts7 indicates the MBSFN Special Timeslot for 1.28Mcps TDD MBSFN Dedicated Carrier.
TimeSlotMeasurementValueListLCR::= SEQUENCE (SIZE (1..6)) OF TimeSlotMeasurementValueLCR
TimeSlotMeasurementValueLCR ::= SEQUENCE {
    timeSlotLCR
                                TimeSlotLCR,
    commonMeasurementValue
                                CommonMeasurementValue,
    iE-Extensions
                                ProtocolExtensionContainer { TimeSlotMeasurementValueListLCR-ExtIEs} } OPTIONAL,
    . . .
TimeSlotMeasurementValueListLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotStatus ::= ENUMERATED {
    active,
   not-active,
TimingAdjustmentValue ::= CHOICE {
    initialPhase
                        INTEGER (0..1048575,...),
    steadyStatePhase
                       INTEGER (0..255,...)
TimingAdjustmentValueLCR ::= CHOICE {
    initialPhase
                        INTEGER (0..524287,...),
```

```
steadyStatePhase
                        INTEGER (0..127,...)
TimingAdvanceApplied ::= ENUMERATED {
   yes,
    no
SynchronisationIndicator ::= ENUMERATED {
    timingMaintainedSynchronisation,
TnlQos ::= CHOICE {
    dsField
                            DsField,
    genericTrafficCategory GenericTrafficCategory,
ToAWE ::= INTEGER (0..2559)
-- Unit ms
ToAWS ::= INTEGER (0..1279)
-- Unit ms
Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
    SEQUENCE {
        tGPSID
                        TGPSID,
        tGSN
                        TGSN,
        tGL1
                        GapLength,
        tGL2
                        GapLength
                                    OPTIONAL,
                        TGD,
        tGD
                        GapDuration,
        tGPL1
                                    GapDuration OPTIONAL,
       not-to-be-used-1
            -- This IE shall never be included in the SEQUENCE. If received it shall be ignored
       uL-DL-mode
                        UL-DL-mode,
       downlink-Compressed-Mode-Method
                                            Downlink-Compressed-Mode-Method
                                                                                 OPTIONAL,
            -- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
       uplink-Compressed-Mode-Method
                                            Uplink-Compressed-Mode-Method
                                                                                 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-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue ::= SEOUENCE (SIZE
(1..maxNrOfCellPortionsPerCell)) OF TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue-
Item
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOTE-HICHTransmissionCellPortionValue-Item ::= SEQUENCE{
                                            CellPortionID,
    cellPortionID
    transmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue.
                                            ProtocolExtensionContainer { { TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-
    iE-Extensions
RGCHOrE-HICHTransmissionCellPortionValue-Item-ExtIEs} }
                                                            OPTIONAL,
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOTE-HICHTransmissionCellPortionValue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION
::= {
TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmissionValue ::= INTEGER(0..100)
-- According to mapping in [22] and [23]
Transmitted-Carrier-Power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Transmitted-Carrier-Power-For-CellPortion-
Value-Item
Transmitted-Carrier-Power-For-CellPortion-Value-Item ::= 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,
       not-Used-split-in-TFCI
                                    NULL,
       -- This choice shall never be made by the CRNC and the Node B shall consider the procedure as failed if it is received.
                       ProtocolExtensionContainer { { TFCS-ExtIEs} }
    iE-Extensions
                                                                            OPTIONAL,
TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    SEQUENCE {
       cTFC
                            TFCS-CTFC,
                        TransportFormatCombination-Beta
       tFC-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),
    ct.fc4bit
                                        INTEGER (0..15),
    ctfc6bit
                                        INTEGER (0..63),
    ctfc8bit
                                        INTEGER (0..255),
    ctfc12bit
                                        INTEGER (0..4095),
    ctfc16bit
                                        INTEGER (0..65535),
    ctfcmaxbit
                                        INTEGER (0..maxCTFC)
Transport-Block-Size-Index ::= INTEGER(1..maxNrOfHS-DSCH-TBSs)
Transport-Block-Size-Index-for-Enhanced-PCH ::= INTEGER(1..32)
-- Index of the value range 1 to 32 of the MAC-ehs transport block size as specified in appendix A of [32]
```

```
Transport-Block-Size-List ::= SEQUENCE (SIZE (1..maxNrOfHS-DSCHTBSsE-PCH)) OF
   SEQUENCE {
       transport-Block-Size-Index-for-Enhanced-PCH
                                                          Transport-Block-Size-Index-for-Enhanced-PCH,
       iE-Extensions
                                  ProtocolExtensionContainer { { Transport-Block-Size-List-ExtIEs} }
                                                                                                                  OPTIONAL,
Transport-Block-Size-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportBearerRequestIndicator ::= ENUMERATED {
   bearerRequested,
   bearerNotRequested,
    . . .
TransportBearerNotRequestedIndicator ::= ENUMERATED {
    transport-bearer-shall-not-be-established,
    transport-bearer-may-not-be-established
TransportBearerNotSetupIndicator ::= ENUMERATED {
    transport-bearer-not-setup
TransportFormatSet ::= SEQUENCE {
   dynamicParts
                           TransportFormatSet-DynamicPartList,
    semi-staticPart
                           TransportFormatSet-Semi-staticPart,
                           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
                                  TransportFormatSet-ModeDP,
       mode
                                   iE-Extensions
                                                                                                                  OPTIONAL,
        . . .
TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
    transmissionTimeIntervalInformation
                                          TransmissionTimeIntervalInformation
                                                                                 OPTIONAL,
    -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to 'dynamic'
```

```
ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
    iE-Extensions
TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
    SEOUENCE {
       transmissionTimeInterval
                                        TransportFormatSet-TransmissionTimeIntervalDynamic,
                                        ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs} }
    iE-Extensions
                                                                                                                           OPTIONAL,
TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTimeInterval
                                        TransportFormatSet-TransmissionTimeIntervalSemiStatic,
    channelCoding
                                    TransportFormatSet-ChannelCodingType,
    codingRate
                                    TransportFormatSet-CodingRate
                                                                                 OPTIONAL,
    -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
    rateMatchingAttribute
                                    TransportFormatSet-RateMatchingAttribute,
    cRC-Size
                                    TransportFormatSet-CRC-Size,
                                    TransportFormatSet-ModeSSP
    mode
                                    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 {
    νO,
    v8,
    v12,
    v16,
    v24,
```

```
TransportFormatSet-ModeDP ::= CHOICE {
                        TDD-TransportFormatSet-ModeDP,
    notApplicable
                                NULL,
TransportFormatSet-ModeSSP ::= CHOICE {
                    TransportFormatSet-SecondInterleavingMode,
    notApplicable
                                NULL,
    . . .
TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)
TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)
TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeSlot-related,
TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    . . .
TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    . . . ,
    msec-5
TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)
TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))
TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
TSN-Length ::= ENUMERATED {
```

```
tsn-6bits,
    tsn-9bits
TUTRANGANSS ::= SEQUENCE {
                    INTEGER (0..16383),
    ls
                    INTEGER (0..4294967295)
TUTRANGANSSAccuracyClass ::= ENUMERATED {
    ganssAccuracy-class-A,
    ganssAccuracy-class-B,
    ganssAccuracy-class-C,
TUTRANGANSSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGANSSChangeLimit
                                        INTEGER (1..256)
                                                                                                                      OPTIONAL,
    predictedTUTRANGANSSDeviationLimit INTEGER(1..256)
                                                                                                                      OPTIONAL,
                            ProtocolExtensionContainer { { TUTRANGANSSMeasurementThresholdInformation-ExtIEs } }
    ie-Extensions
                                                                                                                      OPTIONAL,
TUTRANGANSSMeasurementThresholdInformation-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGANSSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGANSS
                                    TUTRANGANSS.
    tUTRANGANSSQuality
                                    INTEGER (0..255)
                                                                                                                      OPTIONAL,
    tUTRANGANSSDriftRate
                                    INTEGER (-50..50),
    tUTRANGANSSDriftRateQuality
                                    INTEGER (0..50)
                                                                                                                      OPTIONAL,
                            ProtocolExtensionContainer { { TUTRANGANSSMeasurementValueInformation-ExtIEs } }
    ie-Extensions
                                                                                                                      OPTIONAL,
TUTRANGANSSMeasurementValueInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Time-ID
                                    CRITICALITY ignore
                                                             EXTENSION GANSS-Time-ID
                                                                                                                      optional},
                                                                                          PRESENCE
    . . .
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,
   iE-Extensions
                                OPTIONAL,
TUTRANGPSMeasurementThresholdInformation-ExtlEs 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 ::= SEQUENCE {
```

```
rNC-ID
                        RNC-ID,
    c-ID
                        C-ID.
    iE-Extensions
                            ProtocolExtensionContainer { {UC-Id-ExtIEs} } OPTIONAL,
UC-Id-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-RNC-ID
                                CRITICALITY reject
                                                         EXTENSION
                                                                     Extended-RNC-ID PRESENCE
                                                                                                 optional},
UDRE ::= ENUMERATED {
    udre-minusequal-one-m,
    udre-betweenoneandfour-m,
    udre-betweenfourandeight-m,
    udre-greaterequaleight-m
UE-Capability-Information ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
    iE-Extensions
                                        ProtocolExtensionContainer { { UE-Capability-Information-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
UE-Capability-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-LCRTDD-uplink-Physical-Channel-Capability
                                                             CRITICALITY ignore
                                                                                     EXTENSION LCRTDD-Uplink-Physical-Channel-Capability
    PRESENCE optional } |
    {ID id-number-Of-Supported-Carriers
                                                             CRITICALITY reject
                                                                                     EXTENSION Number-Of-Supported-Carriers
    PRESENCE optional },
UE-DPCCH-burst1 ::= ENUMERATED {v1, v2, v5}
    -- Unit subframe
UE-DPCCH-burst2 ::= ENUMERATED {v1, v2, v5}
    -- Unit subframe
UE-DRX-Cycle ::= ENUMERATED {v4, v5, v8, v10, v16, v20}
    -- Unit subframe
UE-DRX-Grant-Monitoring ::= BOOLEAN
    -- true: applied, false: not applied
UE-DTX-Cycle1-2ms ::= ENUMERATED {v1, v4, v5, v8, v10, v16, v20}
    -- Unit subframe
UE-DTX-Cycle1-10ms ::= ENUMERATED {v1, v5, v10, v20}
    -- Unit subframe
UE-DTX-Cycle2-2ms ::= ENUMERATED {v4, v5, v8, v10, v16, v20, v32, v40, v64, v80, v128, v160}
   -- Unit subframe
UE-DTX-Cycle2-10ms ::= ENUMERATED {v5, v10, v20, v40, v80, v160}
```

```
-- Unit subframe
UE-DTX-DRX-Offset ::= INTEGER (0..159)
    -- Unit subframe
UE-DTX-Long-Preamble ::= ENUMERATED {v2, v4, v15}
    -- Units of slots
UL-CapacityCredit ::= INTEGER (0..65535)
UL-Delta-T2TP ::= INTEGER (0..6,...)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
UL-DPDCH-Indicator-For-E-DCH-Operation ::= ENUMERATED {
    ul-DPDCH-present,
    ul-DPDCH-not-present
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem
UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-InformationList
                                            TDD-UL-Code-Information,
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeslotLCR-InformationItem
UL-TimeslotLCR-InformationItem ::= SEQUENCE {
                                            TimeSlotLCR,
    timeSlotLCR
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence,
```

```
uL-Code-InformationList
                                          TDD-UL-Code-LCR-Information,
    iE-Extensions
                                          ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} }
                                                                                                                  OPTIONAL,
UL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
EXTENSION PLCCHinformation
                                                                                                                PRESENCE optional },
UL-Timeslot768-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot768-InformationItem
UL-Timeslot768-InformationItem ::= SEQUENCE {
    timeSlot
                                          TimeSlot,
    midambleShiftAndBurstType768
                                          MidambleShiftAndBurstType768,
    tFCI-Presence
                                          TFCI-Presence,
    uL-Code-InformationList
                                          TDD-UL-Code-768-Information,
    iE-Extensions
                                          ProtocolExtensionContainer { { UL-Timeslot768-InformationItem-ExtIEs} }
                                                                                                                  OPTIONAL,
UL-Timeslot768-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)
UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]
UL-FP-Mode ::= ENUMERATED {
   normal,
    silent,
    . . .
UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
UL-ScramblingCode ::= SEQUENCE {
    uL-ScramblingCodeNumber
                                  UL-ScramblingCodeNumber,
    uL-ScramblingCodeLength
                                  UL-ScramblingCodeLength,
   iE-Extensions
                                   ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } }
                                                                                                                OPTIONAL,
UL-ScramblingCode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-ScramblingCodeNumber ::= INTEGER (0..16777215)
```

```
UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
UL-Synchronisation-Parameters-LCR ::= SEQUENCE {
    uL-Synchronisation-StepSize
                                        UL-Synchronisation-StepSize,
    uL-Synchronisation-Frequency
                                        UL-Synchronisation-Frequency,
    iE-Extensions
                                        ProtocolExtensionContainer { { UL-Synchronisation-Parameters-LCR-ExtIEs } }
                                                                                                                       OPTIONAL,
UL-Synchronisation-Parameters-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Synchronisation-StepSize ::= INTEGER (1..8)
UL-Synchronisation-Frequency ::= INTEGER (1..8)
UPPCHPositionLCR ::= INTEGER (0..127)
UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem
UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
                                    UL-TimeslotISCP-Value,
    iSCP
                                    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 ::= SEOUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem
USCH-InformationItem ::= SEQUENCE {
   uSCH-ID
                                      USCH-ID.
   cCTrCH-ID
                                      CCTrCH-ID,
                                                       -- UL CCTrCH in which the USCH is mapped
   transportFormatSet
                                      TransportFormatSet, -- For USCH
   allocationRetentionPriority
                                      AllocationRetentionPriority,
   iE-Extensions
                                      ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs} }
                                                                                                      OPTIONAL,
   . . .
USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-bindingID
                                      CRITICALITY ignore
                                                           EXTENSION
                                                                     BindingID
                                                                                                    PRESENCE
                                                                                                              optional }|
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-transportlayeraddress
                                      CRITICALITY ignore
                                                           EXTENSION
                                                                     TransportLayerAddress
                                                                                                    PRESENCE
                                                                                                              optional }
   -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-TnlOos
                                      CRITICALITY ignore
                                                                     TnlOos PRESENCE optional
                                                           EXTENSION
   . . .
USCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationResponseItem
USCH-InformationResponseItem ::= SEQUENCE {
   uSCH-ID
                                         USCH-ID,
   bindingID
                                         BindingID
                                                              OPTIONAL,
   transportLayerAddress
                                         TransportLayerAddress
                                                              OPTIONAL,
                                         ProtocolExtensionContainer { { USCH-InformationResponseItem-ExtIEs} }
   iE-Extensions
                                                                                                         OPTIONAL,
USCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotISCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
UL-TimeslotISCP-Value-IncrDecrThres ::= INTEGER (0..126)
USCH-ID ::= INTEGER (0..255)
_____
_____
-- -----
-- -----
```

```
-- Y
-- Z
-- END
```

## 9.3.5 Common Definitions

```
-- Common definitions
__ *********************
NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-CommonDataTypes (3) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
  ****************
-- Extension constants
__ *********************
maxPrivateIEs
                       INTEGER ::= 65535
maxProtocolExtensions
                       INTEGER ::= 65535
                       INTEGER ::= 65535
maxProtocolIEs
__ **********************
-- Common Data Types
__ *********************
Criticality
           ::= ENUMERATED { reject, ignore, notify }
MessageDiscriminator
                ::= ENUMERATED { common, dedicated }
           ::= ENUMERATED { optional, conditional, mandatory }
Presence
PrivateIE-ID ::= CHOICE {
  local
                INTEGER (0..maxPrivateIEs),
  global
                 OBJECT IDENTIFIER
```

```
ProcedureCode ::= INTEGER (0..255)
ProcedureID
             ::= SEQUENCE {
   procedureCode
                          ProcedureCode,
   ddMode
                          ENUMERATED { tdd, fdd, common, ... }
ProtocolIE-ID
                ::= INTEGER (0..maxProtocolIEs)
TransactionID
               ::= CHOICE {
   shortTransActionId
                          INTEGER (0..127),
   longTransActionId
                          INTEGER (0..32767)
TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, 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 ::= 2
id-cellDeletion
                                                ProcedureCode ::= 3
id-cellReconfiguration
                                                ProcedureCode ::= 4
id-cellSetup
                                                ProcedureCode ::= 5
                                                ProcedureCode ::= 45
id-cellSynchronisationInitiation
id-cellSynchronisationReconfiguration
                                                ProcedureCode ::= 46
```

```
ProcedureCode ::= 47
id-cellSynchronisationReporting
id-cellSynchronisationTermination
                                                       ProcedureCode ··= 48
id-cellSynchronisationFailure
                                                       ProcedureCode ::= 49
id-commonMeasurementFailure
                                                       ProcedureCode ::= 6
id-commonMeasurementInitiation
                                                       ProcedureCode ::= 7
id-commonMeasurementReport
                                                       ProcedureCode ::= 8
id-commonMeasurementTermination
                                                       ProcedureCode ::= 9
                                                       ProcedureCode ::= 10
id-commonTransportChannelDelete
id-commonTransportChannelReconfigure
                                                       ProcedureCode ::= 11
id-commonTransportChannelSetup
                                                       ProcedureCode ::= 12
id-compressedModeCommand
                                                       ProcedureCode ::= 14
id-dedicatedMeasurementFailure
                                                       ProcedureCode ::= 16
id-dedicatedMeasurementInitiation
                                                       ProcedureCode ::= 17
id-dedicatedMeasurementReport
                                                       ProcedureCode ::= 18
id-dedicatedMeasurementTermination
                                                       ProcedureCode ::= 19
id-downlinkPowerControl
                                                       ProcedureCode ··= 20
id-downlinkPowerTimeslotControl
                                                       ProcedureCode ::= 38
                                                       ProcedureCode ::= 35
id-errorIndicationForCommon
id-errorIndicationForDedicated
                                                       ProcedureCode ::= 21
id-informationExchangeFailure
                                                       ProcedureCode ::= 40
id-informationExchangeInitiation
                                                       ProcedureCode ::= 41
id-informationExchangeTermination
                                                       ProcedureCode ::= 42
id-informationReporting
                                                       ProcedureCode ::= 43
id-BearerRearrangement
                                                       ProcedureCode ::= 50
id-mBMSNotificationUpdate
                                                       ProcedureCode ::= 53
id-physicalSharedChannelReconfiguration
                                                       ProcedureCode ::= 37
id-privateMessageForCommon
                                                       ProcedureCode ::= 36
id-privateMessageForDedicated
                                                       ProcedureCode ::= 22
id-radioLinkAddition
                                                       ProcedureCode ::= 23
id-radioLinkDeletion
                                                       ProcedureCode ::= 24
id-radioLinkFailure
                                                       ProcedureCode ::= 25
id-radioLinkPreemption
                                                       ProcedureCode ::= 39
id-radioLinkRestoration
                                                       ProcedureCode ::= 26
id-radioLinkSetup
                                                       ProcedureCode ::= 27
                                                       ProcedureCode ::= 13
id-reset
                                                       ProcedureCode ::= 28
id-resourceStatusIndication
id-cellSynchronisationAdjustment
                                                       ProcedureCode ::= 44
id-synchronisedRadioLinkReconfigurationCancellation
                                                       ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit
                                                       ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation
                                                       ProcedureCode ::= 31
id-systemInformationUpdate
                                                       ProcedureCode ::= 32
id-unblockResource
                                                       ProcedureCode ::= 33
id-unSynchronisedRadioLinkReconfiguration
                                                       ProcedureCode ::= 34
id-radioLinkActivation
                                                       ProcedureCode ::= 51
id-radioLinkParameterUpdate
                                                       ProcedureCode ::= 52
id-uEStatusUpdate
                                                       ProcedureCode ::= 54
__ *******************
-- Lists
__ *********************
                           INTEGER ::= 10
maxNrOfCodes
```

```
maxNrOfDLTSs
                            INTEGER ::= 15
maxNrOfDLTSLCRs
                            INTEGER ::= 6
maxNrOfErrors
                            INTEGER ::= 256
maxNrOfTFs
                            INTEGER ::= 32
maxNrOfTFCs
                            INTEGER ::= 1024
                            INTEGER ::= 16
maxNrOfRLs
                            INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-1
                            INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLs-2
maxNrOfRLSets
                            INTEGER ··= maxNrOfRLs
                            INTEGER ::= 240
maxNrOfDPCHs
maxNrOfDPCHsPerRL-1
                            INTEGER ::= 239 -- maxNrofCCTrCH*maxNrOfULTSs-1
maxNrOfDPCHLCRs
                            INTEGER ::= 240
maxNrOfDPCHsLCRPerRL-1
                            INTEGER ::= 95 -- maxNrofCCTrCH*maxNrOfULTSLCRs-1
maxNrOfDPCHs768
                            INTEGER ::= 480
                            INTEGER ::= 479
maxNrOfDPCHs768PerRL-1
maxNrOfSCCPCHs
                            INTEGER ::= 8
                            INTEGER ::= 232
maxNrOfSCCPCHsinExt
maxNrOfSCCPCHs768
                            INTEGER ::= 480
maxNrOfDCHs
                            INTEGER ::= 128
                            INTEGER ::= 32
maxNrOfDSCHs
maxNrOfFACHs
                            INTEGER ::= 8
                            INTEGER ::= 16
maxNrOfCCTrCHs
                            INTEGER ::= 256
maxNrOfPDSCHs
                            INTEGER ::= 16
maxNrOfHSPDSCHs
maxNrOfHSPDSCHs768
                            INTEGER ::= 32
maxNrOfPUSCHs
                            INTEGER ::= 256
                            INTEGER ::= 255
maxNrOfPUSCHs-1
                            INTEGER ::= 256
maxNrOfPDSCHSets
                            INTEGER ::= 8
maxNrOfPRACHLCRs
                            INTEGER ::= 256
maxNrOfPUSCHSets
maxNrOfSCCPCHLCRs
                            INTEGER ::= 8
maxNrOfSCCPCHsLCRinExt
                            INTEGER ::= 88
maxNrOfULTSs
                            INTEGER ::= 15
maxNrOfULTSLCRs
                            INTEGER ::= 6
maxNrOfUSCHs
                            INTEGER ::= 32
maxNrOfSlotFormatsPRACH
                            INTEGER ::= 8
                            INTEGER ::= 256
maxCellinNodeB
                            INTEGER ::= 256
maxCCPinNodeB
maxCTFC
                            INTEGER ::= 16777215
maxLocalCellinNodeB
                            INTEGER ::= maxCellinNodeB
maxFPACHCell
                            INTEGER ::= 8
maxRACHCell
                            INTEGER ::= maxPRACHCell
maxPLCCHCell
                            INTEGER ::= 16
                            INTEGER ::= 16
maxPRACHCell
maxSCCPCHCell
                            INTEGER ::= 32
maxSCCPCHCellinExt
                            INTEGER ::= 208 -- maxNrOfSCCPCHs + maxNrOfSCCPCHsinExt - maxSCCPCHCell
maxSCCPCHCellinExtLCR
                            INTEGER ::= 64 -- maxNrOfSCCPCHLCRs + maxNrOfSCCPCHsLCRinExt - maxSCCPCHCell
maxSCCPCHCell768
                            INTEGER ::= 480
maxSCPICHCell
                            INTEGER ::= 32
                            INTEGER ::= 4
maxTTI-count
maxIBSEG
                            INTEGER ::= 16
maxIB
                            INTEGER ::= 64
maxFACHCell
                            INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching
                            INTEGER ::= 256
```

```
maxHS-PDSCHCodeNrComp-1
                            INTEGER ::= 15
maxHS-SCCHCodeNrComp-1
                            INTEGER ::= 127
maxNrOfCellSvncBursts
                            INTEGER ::= 10
maxNrOfReceptsPerSyncFrame
                            INTEGER ::= 16
maxNrOfMeasNCell
                            INTEGER ::= 96
maxNrOfMeasNCell-1
                            INTEGER ::= 95
                                            -- maxNrOfMeasNCell - 1
maxNrOfSF
                            INTEGER ::= 8
maxTGPS
                            INTEGER ::= 6
maxCommunicationContext
                            INTEGER ::= 1048575
                            INTEGER ::= 256
maxNrOfLevels
maxNoSat
                            INTEGER ::= 16
maxNoGPSItems
                            INTEGER ::= 8
maxNrOfHSSCCHs
                            INTEGER ::= 32
maxNrOfHSSICHs
                            INTEGER ::= 4
maxNrOfHSSICHs-1
                            INTEGER ::= 3
maxNrOfSyncFramesLCR
                            INTEGER ::= 512
maxNrOfReceptionsperSyncFrameLCR
                                    INTEGER ::= 8
maxNrOfSyncDLCodesLCR
                            INTEGER ::= 32
maxNrOfHSSCCHCodes
                                INTEGER ::= 4
maxNrOfMACdFlows
                                INTEGER ::= 8
maxNrOfMACdFlows-1
                                INTEGER ::= 7
                                                -- maxNrOfMACdFlows - 1
                                INTEGER ::= 8
maxNrOfMACdPDUIndexes
                                INTEGER ::= 7
maxNrOfMACdPDUIndexes-1
                                                -- maxNoOfMACdPDUIndexes - 1
maxNrOfMACdPDUSize
                                INTEGER ::= 32
                                INTEGER ::= 256
maxNrOfNIs
                                INTEGER ::= 8
maxNrOfPriorityQueues
                                INTEGER ::= 7
                                                -- maxNoOfPrioritvOueues - 1
maxNrOfPrioritvOueues-1
maxNrOfHAROProcesses
                                INTEGER ::= 8
maxNrOfContextsOnUeList
                                INTEGER ::= 16
                                INTEGER ::= 64
maxNrOfCellPortionsPerCell
maxNrOfCellPortionsPerCell-1
                                INTEGER ::= 63
maxNrOfPriorityClasses
                                INTEGER ::= 16
maxNrOfSatAlmanac-maxNoSat
                                INTEGER ::= 16
                                                -- maxNrofSatAlmanac - maxNoSat
maxNrOfE-AGCHs
                                INTEGER ::= 32
maxNrOfEDCHMACdFlows
                                INTEGER ::= 8
maxNrOfEDCHMACdFlows-1
                                INTEGER ::= 7
                                INTEGER ::= 32
maxNrOfE-RGCHs-E-HICHs
maxNrOfEDCH-HARO-PO-OUANTSTEPs INTEGER ::= 6
maxNrOfEDCHHAROProcesses2msEDCH INTEGER ::= 8
maxNrOfEDPCCH-PO-QUANTSTEPs
                                INTEGER ::= 8
maxNrOfBits-MACe-PDU-non-scheduled INTEGER ::= 19982
maxNrOfRefETFCIs
                                INTEGER ::= 8
maxNrOfRefETFCI-PO-QUANTSTEPs
                                INTEGER ::= 29
                                INTEGER ::= 39
maxNrofSigSegRGHI-1
                                INTEGER ::= 16
maxNoOfLogicalChannels
                                                -- only maximum 15 can be used
maxNrOfCombEDPDCH
                                INTEGER ::= 12
maxE-RUCCHCell
                                INTEGER ::= 16
maxNrOfEAGCHCodes
                                INTEGER ::= 4
                                INTEGER ::= 8
maxNrOfRefBetas
maxNrOfE-PUCHSlots
                                INTEGER ::= 13
maxNrOfEAGCHs
                                INTEGER ::= 32
maxNrOfHS-DSCH-TBSs-HS-SCCHless INTEGER ::= 4
                                INTEGER ::= 90
maxNrOfHS-DSCH-TBSs
                                INTEGER ::= 4
maxNrOfEHICHCodes
```

```
maxNrOfE-PUCHSlotsLCR
                                INTEGER ::= 5
maxNrOfEPIICHcodes
                                INTEGER ::= 16
maxNrOfEHICHs
                                INTEGER ::= 32
maxNrOfCommonMACFlows
                                INTEGER ::= 8
maxNrOfCommonMACFlows-1
                                INTEGER ::= 7
maxNrOfPagingMACFlow
                                INTEGER ::= 4
maxNrOfPagingMACFlow-1
                                INTEGER ::= 3
maxNrOfcommonMACOueues
                                INTEGER ::= 8
maxNrOfpagingMACQueues
                                INTEGER ::= 8
maxNrOfHS-DSCHTBSsE-PCH
                                INTEGER ::= 2
maxGANSSSat
                                INTEGER ::= 64
                                INTEGER ::= 8
maxNoGANSS
                                INTEGER ::= 8
maxSqnType
maxFrequencyinCell
                                INTEGER ::= 12
maxFrequencyinCell-1
                                INTEGER ::= 11
maxHSDPAFrequency
                                INTEGER ::= 8
maxHSDPAFrequency-1
                                INTEGER ::= 7
maxNrOfHSSCCHsinExt
                                INTEGER ::= 224
                                INTEGER ::= 36
maxGANSSSatAlmanac
maxGANSSClockMod
                                INTEGER ::= 4
maxNrOfEDCHRLs
                                INTEGER · · = 4
maxERNTItoRelease
                                INTEGER ::= 256
maxNrOfCommonEDCH
                                INTEGER ::= 32
maxNrOfCommonMACFlowsLCR
                                INTEGER ::= 256
maxNrOfCommonMACFlowsLCR-1
                                INTEGER ::= 255
maxNrOfHSSCCHsLCR
                                INTEGER ::= 256
maxNrOfEDCHMACdFlowsLCR
                                INTEGER ::= 256
maxNrOfEDCHMACdFlowsLCR-1
                                INTEGER ::= 255
                                INTEGER ::= 256
maxNrOfEAGCHsLCR
maxNrOfEHICHsLCR
                                INTEGER ::= 256
                                INTEGER ::= 32
maxnrofERUCCHsLCR
                                INTEGER ::= 32
maxNrOfHSDSCH-1
maxNrOfHSDSCH
                                INTEGER ::= 33
maxGANSS-1
                                INTEGER ::= 7
-- IEs
id-AICH-Information
                                                                     ProtocolIE-ID ::= 0
id-ATCH-InformationItem-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 1
id-BCH-Information
                                                                     ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 8
id-BCCH-ModificationTime
                                                                     ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator
                                                                     ProtocolIE-ID ::= 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
<pre>id-CommonPhysicalChannelType-CTCH-SetupRqstTDD</pre>	ProtocolIE-ID ::= 37
id-CommunicationControlPortID	ProtocolIE-ID ::= 40
id-ConfigurationGenerationID	ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID	ProtocolIE-ID ::= 44
id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-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-Unused-ProtocolIE-ID-87	ProtocolIE-ID ::= 87
id-Unused-ProtocolIE-ID-89	ProtocolIE-ID ::= 89
id-Unused-ProtocolIE-ID-91	ProtocolIE-ID ::= 91
id-Unused-ProtocolIE-ID-93	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
-	

id-Unused-ProtocolIE-ID-106	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-Unused-ProtocolIE-ID-108	ProtocolIE-ID ::= 108
id-Unused-ProtocolIE-ID-112	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
<pre>id-Local-Cell-InformationItem-ResourceStatusInd</pre>	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

11 7 1 201 7 5 11 2 11 7 17 17 17 17	D : 3.77 7D 170
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249

id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 259
<del>-</del>	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	
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 ::= 310
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 141 ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRgstFDD	ProtocolIE-ID ::= 316
<u>-</u>	
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-Not-Used-320	ProtocolIE-ID ::= 320
id-Not-Used-322	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailure	ProtocolIE-ID ::= 324

id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-Not-Used-330	ProtocolIE-ID ::= 330
id-Not-Used-332	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-Not-Used-336	ProtocolIE-ID ::= 336
id-Not-Used-342	ProtocolIE-ID ::= 342
id-Not-Used-343	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-Unused-ProtocolIE-ID-94	ProtocolIE-ID ::= 94
id-Unused-ProtocolIE-ID-110	ProtocolIE-ID ::= 110
id-Unused-ProtocolIE-ID-111	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-Not-Used-376	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-Unused-ProtocolIE-ID-443	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD	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
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id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407				
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408				
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409				
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412				
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414				
id-ResetIndicator	ProtocolIE-ID ::= 416				
id-Unused-ProtocolIE-ID-417	ProtocolIE-ID ::= 417				
id-Unused-ProtocolIE-ID-418	ProtocolIE-ID ::= 418				
id-Unused-ProtocolIE-ID-419	ProtocolIE-ID ::= 419				
id-Unused-ProtocolIE-ID-142	ProtocolIE-ID ::= 142				
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287				
id-CFNReportingIndicator	ProtocolIE-ID ::= 6				
id-SFNReportingIndicator	ProtocolIE-ID ::= 11				
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12				
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283				
id-PICH-ParametersItem-CTCH-SetupRgstTDD	ProtocolIE-ID ::= 167				
<u> </u>	ProtocolIE-ID ::= 167 ProtocolIE-ID ::= 20				
id-PRACH-ParametersItem-CTCH-SetupRqstTDD					
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				
<pre>id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD</pre>	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				
<del>-</del>	ProtocolIE-ID ::= 437				
id-SynchronisationReportType					
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439				
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440				
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119				
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435				
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436				
id-InformationExchangeID	ProtocolIE-ID ::= 444				
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445				
id-InformationType	ProtocolIE-ID ::= 446				
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447				
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448				
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449				
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451				
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452				
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453				
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454				
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74				
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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-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-Unused-ProtocolIE-ID-26	ProtocolIE-ID ::= 26
id-Unused-ProtocolIE-ID-27	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
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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
${\tt id} ext{-SFNSFNMeasurementThresholdInformation}$	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-SetupRgstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-E-AGCH-E-RGCH-E-HICH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= 102
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 103
id-transportlayeraddress	ProtocolIE-ID ::= 104
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRgstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRgstTDD	ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
id-AccumulatedClockupdate-CellSyncReprtTDD	ProtocolIE-ID ::= 552
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 534
id-HSDSCH-RNTI	ProtocolIE-ID ::= 535

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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
id-Unused-ProtocolIE-ID-64
                                                                    ProtocolIE-ID ::= 64
                                                                    ProtocolIE-ID ::= 66
id-PDSCH-RL-ID
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-SetupRgstTDD
                                                                    ProtocolIE-ID ::= 560
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRastTDD
                                                                     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-SetupRgstTDD
                                                                     ProtocolIE-ID ::= 567
id-CCTrCH-Minimum-DL-Power-RL-SetupRastTDD
                                                                     ProtocolTE-ID ::= 568
id-CCTrCH-Maximum-DL-Power-RL-AdditionRgstTDD
                                                                    ProtocolIE-ID ::= 569
id-CCTrCH-Minimum-DL-Power-RL-AdditionRgstTDD
                                                                     ProtocolTE-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-ReconfRgstTDD
                                                                    ProtocolIE-ID ::= 578
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRastTDD
                                                                     ProtocolIE-ID ::= 579
id-Initial-DL-Power-TimeslotLCR-InformationItem
                                                                     ProtocolIE-ID ::= 580
id-Maximum-DL-Power-TimeslotLCR-InformationItem
                                                                    ProtocolIE-ID ::= 581
id-Minimum-DL-Power-TimeslotLCR-InformationItem
                                                                    ProtocolIE-ID ::= 582
id-HS-DSCHProvidedBitRateValueInformation
                                                                    ProtocolIE-ID ::= 583
id-HS-DSCHRequiredPowerValueInformation
                                                                     ProtocolIE-ID ::= 585
id-HS-DSCHRequiredPowerValue
                                                                    ProtocolIE-ID ::= 586
id-TransmittedCarrierPowerOfAllCodesNotUsedForHSTransmission
                                                                         ProtocolIE-ID ::= 587
id-HS-SICH-Reception-Quality
                                                                     ProtocolIE-ID ::= 588
id-HS-SICH-Reception-Quality-Measurement-Value
                                                                     ProtocolIE-ID ::= 589
                                                                     ProtocolIE-ID ::= 590
id-HSSICH-Info-DM-Rprt
id-HSSICH-Info-DM-Rast
                                                                    ProtocolIE-ID ::= 591
id-HSSICH-Info-DM-Rsp
                                                                     ProtocolTE-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-SetupRqstFDD
                                                                    ProtocolIE-ID ::= 597
id-CellPortion-InformationList-Cell-SetupRqstFDD
                                                                    ProtocolIE-ID ::= 598
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD
                                                                     ProtocolIE-ID ::= 599
                                                                    ProtocolIE-ID ::= 600
id-Secondary-CPICH-Information
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
                                                                                                             ProtocolTE-ID ··= 604
id-multipleRL-dl-DPCH-InformationModifyList
                                                                                                            ProtocolIE-ID ::= 605
id-multipleRL-ul-DPCH-InformationList
                                                                                                            ProtocolIE-ID ::= 606
id-multipleRL-ul-DPCH-InformationModifyList
                                                                                                            ProtocolIE-ID ::= 607
id-RI-ID
                                                                                                            ProtocolIE-ID ::= 608
id-SAT-Info-Almanac-ExtItem
                                                                                                             ProtocolIE-ID ::= 609
                                                                                                            ProtocolIE-ID ::= 610
id-HSDPA-Capability
id-HSDSCH-Resources-Information-AuditRsp
                                                                                                             ProtocolTE-ID ::= 611
id-HSDSCH-Resources-Information-ResourceStatusInd
                                                                                                            ProtocolIE-ID ::= 612
id-HSDSCH-MACdFlows-to-Add
                                                                                                             ProtocolIE-ID ::= 613
                                                                                                             ProtocolIE-ID ::= 614
id-HSDSCH-MACdFlows-to-Delete
                                                                                                            ProtocolIE-ID ::= 615
id-HSDSCH-Information-to-Modify-Unsynchronised
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-Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOTE-HICH Transmission Cell Portion Control Cont
                                                                                                                                                                                             ProtocolIE-ID ::= 620
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCH-HS-SCCH-E-AGCH-E-RGCHOrE-HICHTransmissionCellPortionValue
                                                                                                                                                                                         ProtocolIE-ID ::= 621
id-UpPTSInterferenceValue
                                                                                                             ProtocolIE-ID ::= 622
id-PrimaryCCPCH-RSCP-Delta
                                                                                                             ProtocolTE-ID ::= 623
id-MeasurementRecoveryBehavior
                                                                                                            ProtocolIE-ID ::= 624
id-MeasurementRecoveryReportingIndicator
                                                                                                             ProtocolTE-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
                                                                                                             ProtocolIE-ID ::= 630
id-DL-DPCH-Power-Information-RL-ReconfPrepFDD
                                                                                                            ProtocolIE-ID ::= 631
id-F-DPCH-Information-RL-ReconfPrepFDD
id-F-DPCH-Information-RL-SetupRgstFDD
                                                                                                             ProtocolIE-ID ::= 632
id-Additional-S-CCPCH-Parameters-CTCH-ReconfRgstTDD
                                                                                                            ProtocolIE-ID ::= 633
id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD
                                                                                                             ProtocolIE-ID ::= 634
id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRgstTDD
                                                                                                             ProtocolIE-ID ::= 635
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRqstTDD
                                                                                                            ProtocolIE-ID ::= 636
                                                                                                             ProtocolIE-ID ::= 637
id-MICH-CFN
                                                                                                            ProtocolIE-ID ::= 638
id-MICH-Information-AuditRsp
id-MICH-Information-ResourceStatusInd
                                                                                                             ProtocolIE-ID ::= 639
id-MICH-Parameters-CTCH-ReconfRqstFDD
                                                                                                            ProtocolIE-ID ::= 640
id-MICH-Parameters-CTCH-ReconfRgstTDD
                                                                                                            ProtocolIE-ID ::= 641
id-MICH-Parameters-CTCH-SetupRgstFDD
                                                                                                            ProtocolIE-ID ::= 642
id-MICH-Parameters-CTCH-SetupRgstTDD
                                                                                                            ProtocolIE-ID ::= 643
                                                                                                             ProtocolIE-ID ::= 644
id-Modification-Period
id-NI-Information-NotifUpdateCmd
                                                                                                             ProtocolIE-ID ::= 645
id-S-CCPCH-InformationListExt-AuditRsp
                                                                                                             ProtocolTE-ID ::= 646
id-S-CCPCH-InformationListExt-ResourceStatusInd
                                                                                                            ProtocolIE-ID ::= 647
id-S-CCPCH-LCR-InformationListExt-AuditRsp
                                                                                                            ProtocolIE-ID ::= 648
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd
                                                                                                            ProtocolIE-ID ::= 649
id-HARQ-Preamble-Mode
                                                                                                            ProtocolIE-ID ::= 650
id-Initial-DL-DPCH-TimingAdjustment
                                                                                                            ProtocolIE-ID ::= 651
id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                                                                            ProtocolIE-ID ::= 652
id-DLTransmissionBranchLoadValue
                                                                                                             ProtocolIE-ID ::= 653
id-Power-Local-Cell-Group-choice-CM-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
```

	D . 170 70 650
id-SynchronisationIndicator	ProtocolIE-ID ::= 657
id-HSDPA-And-EDCH-CellPortion-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 658
id-Unused-ProtocolIE-ID-659	ProtocolIE-ID ::= 659
id-HS-DSCHRequiredPowerValue-For-Cell-Portion	ProtocolIE-ID ::= 660
id-HS-DSCHRequiredPowerValueInformation-For-CellPortion	ProtocolIE-ID ::= 661
id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion	ProtocolIE-ID ::= 662
id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code	ProtocolIE-ID ::= 663
id-E-AGCH-FDD-Code-Information	ProtocolIE-ID ::= 664
id-E-DCH-Capability	ProtocolIE-ID ::= 665
id-E-DCH-FDD-DL-Control-Channel-Information	ProtocolIE-ID ::= 666
id-E-DCH-FDD-Information	ProtocolIE-ID ::= 667
id-E-DCH-FDD-Information-Response	ProtocolIE-ID ::= 668
id-E-DCH-FDD-Information-to-Modify	ProtocolIE-ID ::= 669
id-E-DCH-MACdFlows-to-Add	ProtocolIE-ID ::= 670
id-E-DCH-MACdFlows-to-Delete	ProtocolIE-ID ::= 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-FDD-S-CCPCH-FrameOffset-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 681
id-E-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 682
id-Maximum-Target-ReceivedTotalWideBandPower	ProtocolIE-ID ::= 683
id-E-DCHProvidedBitRateValueInformation	ProtocolIE-ID ::= 684
id-HARQ-Preamble-Mode-Activation-Indicator	ProtocolIE-ID ::= 685
id-RL-Specific-E-DCH-Info	ProtocolIE-ID ::= 686
id-E-DCH-CapacityConsumptionLaw	ProtocolIE-ID ::= 687
id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp	ProtocolIE-ID ::= 688
id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp	ProtocolIE-ID ::= 689
id-E-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 690
id-Unused-ProtocolIE-ID-691	ProtocolIE-ID ::= 691
id-multipleRL-dl-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 692
id-Target-NonServing-EDCH-To-Total-EDCH-Power-Ratio	ProtocolIE-ID ::= 693
id-CellPortion-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 694
id-CellPortion-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 695
id-multiple-PUSCH-InfoList-DM-Rsp	ProtocolIE-ID ::= 696
id-multiple-PUSCH-InfoList-DM-Rprt	ProtocolIE-ID ::= 697
id-Reference-ReceivedTotalWideBandPower	ProtocolIE-ID ::= 698
id-E-DCH-Serving-Cell-Change-Info-Response	ProtocolIE-ID ::= 699
id-HS-DSCH-Serving-Cell-Change-Info	
	ProtocolIE-ID ::= 700
id-HS-DSCH-Serving-Cell-Change-Info-Response	ProtocolIE-ID ::= 701
id-Serving-Cell-Change-CFN	ProtocolIE-ID ::= 702
id-E-DCH-HARQ-Combining-Capability	ProtocolIE-ID ::= 703
id-E-DCH-TTI2ms-Capability	ProtocolIE-ID ::= 704
id-E-DCH-SF-Capability	ProtocolIE-ID ::= 705
id-E-DCH-FDD-Update-Information	ProtocolIE-ID ::= 706
id-F-DPCH-Capability	ProtocolIE-ID ::= 707
id-E-DCH-Non-serving-Relative-Grant-Down-CommandsValue	ProtocolIE-ID ::= 708
id-HSSICH-SIRTarget	ProtocolIE-ID ::= 709
id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp	ProtocolIE-ID ::= 710

id-PLCCH-Information-AuditRsp	ProtocolIE-ID ::= 711
id-PLCCH-Information-ResourceStatusInd	ProtocolIE-ID ::= 711 ProtocolIE-ID ::= 712
id-PLCCH-Information-RL-ReconfPrepTDDLCR	ProtocolIE-ID ::= 713
id-PLCCH-Information-UL-TimeslotLCR-Info	ProtocolIE-ID ::= 713 ProtocolIE-ID ::= 714
id-PLCCH-InformationList-AuditRsp	ProtocolIE-ID ::= 714  ProtocolIE-ID ::= 715
id-PLCCH-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 716
id-PLCCH-Parameters-CTCH-ReconfRgstTDD	
±	ProtocolIE-ID ::= 717
id-S-CCPCH-768-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 718 ProtocolIE-ID ::= 719
id-PICH-768-Parameters-CTCH-SetupRqstTDD	ProtocoliE-ID ::= 719 ProtocolIE-ID ::= 720
id-PRACH-768-Parameters-CTCH-SetupRqstTDD	
id-S-CCPCH-768-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 721
id-PICH-768-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 722
id-MICH-768-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 723
id-CommonPhysicalChannelID768-CommonTrChDeletionReq	ProtocolIE-ID ::= 724
id-S-CCPCH-768-InformationList-AuditRsp	ProtocolIE-ID ::= 725
id-S-CCPCH-768-Information-AuditRsp	ProtocolIE-ID ::= 726
id-neighbouringTDDCellMeasurementInformation768	ProtocolIE-ID ::= 727
id-PCCPCH-768-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 728
id-SCH-768-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 729
id-SCH-768-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 730
id-PCCPCH-768-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 731
id-P-CCPCH-768-Information-AuditRsp	ProtocolIE-ID ::= 732
id-PICH-768-Information-AuditRsp	ProtocolIE-ID ::= 733
id-PRACH-768-InformationList-AuditRsp	ProtocolIE-ID ::= 734
id-SCH-768-Information-AuditRsp	ProtocolIE-ID ::= 735
id-MICH-768-Information-AuditRsp	ProtocolIE-ID ::= 736
id-PRACH-768-Information	ProtocolIE-ID ::= 737
id-S-CCPCH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 738
id-P-CCPCH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 739
id-PICH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 740
id-PRACH-768-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 741
id-SCH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 742
id-MICH-768-Information-ResourceStatusInd	ProtocolIE-ID ::= 743
id-S-CCPCH-768-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 744
id-UL-DPCH-768-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 745
id-DL-DPCH-768-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 746
id-DL-DPCH-InformationItem-768-RL-AdditionRqstTDD	ProtocolIE-ID ::= 747
id-UL-DPCH-InformationItem-768-RL-AdditionRqstTDD	ProtocolIE-ID ::= 748
id-UL-DPCH-768-InformationAddItemIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 749
id-UL-DPCH-768-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 750
id-UL-DPCH-768-InformationModify-AddItem	ProtocolIE-ID ::= 751
id-UL-DPCH-768-InformationModify-AddList	ProtocolIE-ID ::= 752
id-UL-Timeslot768-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 753
id-DL-DPCH-768-InformationAddItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 754
id-DL-DPCH-768-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 755
id-DL-DPCH-768-InformationModify-AddItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 756
id-DL-DPCH-768-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 757
id-DL-Timeslot-768-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 758
id-DPCH-ID768-DM-Rqst	ProtocolIE-ID ::= 759
id-multiple-DedicatedMeasurementValueList-768-TDD-DM-Rsp	ProtocolIE-ID ::= 760
id-DPCH-ID768-DM-Rsp	ProtocolIE-ID ::= 761
id-Rx-Timing-Deviation-Value-768	ProtocolIE-ID ::= 762
id-DPCH-ID768-DM-Rprt	ProtocolIE-ID ::= 763
id-PDSCH-AddInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 764
4	

id-PDSCH-ModifyInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 765
id-PUSCH-AddInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 766
id-PUSCH-ModifyInformation-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 767
id-dL-HS-PDSCH-Timeslot-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 768
id-hS-SCCH-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 769
id-hS-SCCH-InformationModify-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 770
id-hsSCCH-Specific-Information-ResponseTDD768	ProtocolIE-ID ::= 771
id-E-DPCH-Information-RL-AdditionReqFDD	ProtocolIE-ID ::= 772
id-PDSCH-Timeslot-Format-PSCH-ReconfRgst-LCR	ProtocolIE-ID ::= 775
id-PUSCH-Timeslot-Format-PSCH-ReconfRqst-LCR	ProtocolIE-ID ::= 780
id-E-DCH-PowerOffset-for-SchedulingInfo	ProtocolIE-ID ::= 782
id-HSDSCH-Configured-Indicator	ProtocolIE-ID ::= 782 ProtocolIE-ID ::= 783
<u> </u>	
id-Rx-Timing-Deviation-Value-384-ext	ProtocolIE-ID ::= 786
id-RTWP-ReportingIndicator	ProtocolIE-ID ::= 787
id-RTWP-CellPortion-ReportingIndicator	ProtocolIE-ID ::= 788
id-Received-Scheduled-EDCH-Power-Share-Value	ProtocolIE-ID ::= 789
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion-Value	ProtocolIE-ID ::= 790
id-Received-Scheduled-EDCH-Power-Share	ProtocolIE-ID ::= 791
id-Received-Scheduled-EDCH-Power-Share-For-CellPortion	ProtocolIE-ID ::= 792
id-tFCI-Presence	ProtocolIE-ID ::= 793
id-HSSICH-TPC-StepSize	ProtocolIE-ID ::= 794
id-E-RUCCH-InformationList-AuditRsp	ProtocolIE-ID ::= 795
id-E-RUCCH-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 796
id-E-DCH-TDD-CapacityConsumptionLaw	ProtocolIE-ID ::= 797
id-E-RUCCH-Information	ProtocolIE-ID ::= 798
id-E-DCH-Information	ProtocolIE-ID ::= 799
id-E-DCH-Information-Response	ProtocolIE-ID ::= 800
id-E-DCH-Information-Reconfig	ProtocolIE-ID ::= 800 ProtocolIE-ID ::= 801
<u> </u>	
id-E-PUCH-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 802
id-Add-To-E-AGCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 803
id-Modify-E-AGCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 804
id-Delete-From-E-AGCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 805
id-E-HICH-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 806
id-E-HICH-TimeOffset	ProtocolIE-ID ::= 807
id-Maximum-Generated-ReceivedTotalWideBandPowerInOtherCells	ProtocolIE-ID ::= 808
id-E-DCH-Serving-RL-ID	ProtocolIE-ID ::= 809
id-E-RUCCH-768-InformationList-AuditRsp	ProtocolIE-ID ::= 810
id-E-RUCCH-768-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 811
id-E-RUCCH-768-Information	ProtocolIE-ID ::= 812
id-E-DCH-768-Information	ProtocolIE-ID ::= 813
id-E-DCH-768-Information-Reconfig	ProtocolIE-ID ::= 814
id-E-PUCH-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 815
id-Add-To-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 816
id-Modify-E-AGCH-Resource-Pool-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 817
id-E-HICH-Information-768-PSCH-ReconfRqst	ProtocolIE-ID ::= 818
id-ExtendedPropagationDelay	ProtocolIE-ID ::= 819
1 9 1	ProtocolIE-ID ::= 819
id-Extended-Round-Trip-Time-Value	
id-AlternativeFormatReportingIndicator	ProtocolIE-ID ::= 821
id-DCH-Indicator-For-E-DCH-HSDPA-Operation	ProtocolIE-ID ::= 822
id-Reference-ReceivedTotalWideBandPowerReporting	ProtocolIE-ID ::= 823
id-Reference-ReceivedTotalWideBandPowerSupportIndicator	ProtocolIE-ID ::= 824
id-ueCapability-Info	ProtocolIE-ID ::= 825
id-MAChs-ResetIndicator	ProtocolIE-ID ::= 826
id-Fast-Reconfiguration-Mode	ProtocolIE-ID ::= 827

id-Fast-Reconfiguration-Permission	ProtocolIE-ID ::= 828
id-BroadcastReference	ProtocolIE-ID ::= 829
id-BroadcastCommonTransportBearerIndication	ProtocolIE-ID ::= 830
id-ContinuousPacketConnectivityDTX-DRX-Capability	ProtocolIE-ID ::= 831
id-ContinuousPacketConnectivityDTX-DRX-Information	ProtocolIE-ID ::= 832
id-ContinuousPacketConnectivityHS-SCCH-less-Capability	ProtocolIE-ID ::= 833
id-ContinuousPacketConnectivityHS-SCCH-less-Information	ProtocolIE-ID ::= 834
id-ContinuousPacketConnectivityHS-SCCH-less-Information-Response	ProtocolIE-ID ::= 835
id-CPC-Information	ProtocolIE-ID ::= 836
id-MIMO-Capability	ProtocolIE-ID ::= 837
id-MIMO-PilotConfiguration	ProtocolIE-ID ::= 838
id-MBSFN-Cell-ParameterID-Cell-SetupRqstTDD	ProtocolIE-ID ::= 841
id-MBSFN-Cell-ParameterID-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 842
id-S-CCPCH-Modulation	ProtocolIE-ID ::= 843
id-HS-PDSCH-Code-Change-Grant	ProtocolIE-ID ::= 844
id-HS-PDSCH-Code-Change-Indicator	ProtocolIE-ID ::= 845
id-SYNC-UL-Partition-LCR	ProtocolIE-ID ::= 846
id-E-DCH-LCR-Information	ProtocolIE-ID ::= 847
id-E-DCH-LCR-Information-Reconfig	ProtocolIE-ID ::= 848
id-E-PUCH-Information-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 852
id-Add-To-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 853
id-Modify-E-AGCH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 854
id-Add-To-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 855
id-Modify-E-HICH-Resource-Pool-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 856
id-Delete-From-E-HICH-Resource-Pool-PSCH-ReconfRgst	ProtocolIE-ID ::= 857
id-E-HICH-TimeOffsetLCR	ProtocolIE-ID ::= 858
id-SixtyfourQAM-DL-Capability	ProtocolIE-ID ::= 860
id-SixteenQAM-UL-Capability	ProtocolIE-ID ::= 861
id-HSDSCH-MACdPDU-SizeCapability	ProtocolIE-ID ::= 864
id-HSDSCH-MACdPDUSizeFormat	ProtocolIE-ID ::= 865
id-MaximumMACdPDU-SizeExtended	ProtocolIE-ID ::= 866
id-F-DPCH-SlotFormat	ProtocolIE-ID ::= 870
id-F-DPCH-SlotFormatCapability	ProtocoliE-ID ::= 870
id-LCRTDD-uplink-Physical-Channel-Capability	ProtocoliE-ID ::= 871
id-Extended-RNC-ID	ProtocoliE-ID ::= 873
	ProtocoliE-ID ::= 874
id-Max-UE-DTX-Cycle	
id-Secondary-CCPCH-SlotFormat-Extended	ProtocolIE-ID ::= 876
id-MBSFN-Only-Mode-Indicator-Cell-SetupRqstTDD-LCR	ProtocolIE-ID ::= 878
id-MBSFN-Only-Mode-Capability	ProtocolIE-ID ::= 879
id-Time-Slot-Parameter-ID	ProtocolIE-ID ::= 880
id-Additional-failed-HS-SICH	ProtocolIE-ID ::= 881
id-Additional-missed-HS-SICH	ProtocolIE-ID ::= 882
id-Additional-total-HS-SICH	ProtocolIE-ID ::= 883
id-Additional-HS-SICH-Reception-Quality-Measurement-Value	ProtocolIE-ID ::= 884
id-GANSS-Common-Data	ProtocolIE-ID ::= 887
id-GANSS-Information	ProtocolIE-ID ::= 888
id-GANSS-Generic-Data	ProtocolIE-ID ::= 889
id-TUTRANGANSSMeasurementThresholdInformation	ProtocolIE-ID ::= 890
id-TUTRANGANSSMeasurementValueInformation	ProtocolIE-ID ::= 891
id-ModulationPO-MBSFN	ProtocolIE-ID ::= 892
id-Enhanced-FACH-Capability	ProtocolIE-ID ::= 895
id-Enhanced-PCH-Capability	ProtocolIE-ID ::= 896
id-HSDSCH-Common-System-InformationFDD	ProtocolIE-ID ::= 897
id-HSDSCH-Common-System-Information-ResponseFDD	ProtocolIE-ID ::= 898

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id-HSDSCH-Paging-System-InformationFDD
                                                                     ProtocolIE-ID ::= 899
id-HSDSCH-Paging-System-Information-ResponseFDD
                                                                     ProtocolIE-ID ::= 900
id-MBMS-Capability
                                                                     ProtocolIE-ID ::= 901
id-Ext-Reference-E-TFCI-PO
                                                                     ProtocolIE-ID ::= 902
id-Ext-Max-Bits-MACe-PDU-non-scheduled
                                                                     ProtocolIE-ID ::= 903
id-HARO-MemoryPartitioningInfoExtForMIMO
                                                                     ProtocolIE-ID ::= 904
id-MIMO-ActivationIndicator
                                                                     ProtocolIE-ID ::= 905
                                                                     ProtocolIE-ID ::= 906
id-MIMO-Mode-Indicator
id-MTMO-N-M-Ratio
                                                                     ProtocolTE-TD ::= 907
id-IPMulticastIndication
                                                                     ProtocolIE-ID ::= 908
id-IPMulticastDataBearerIndication
                                                                     ProtocolIE-ID ::= 909
                                                                     ProtocolIE-ID ::= 910
id-TransportBearerNotSetupIndicator
                                                                     ProtocolIE-ID ::= 911
id-TransportBearerNotRequestedIndicator
id-TimeSlotConfigurationList-LCR-CTCH-SetupRgstTDD
                                                                     ProtocolIE-ID ::= 912
id-Cell-Frequency-List-Information-LCR-MulFreq-AuditRsp
                                                                     ProtocolIE-ID ::= 913
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-AuditRsp
                                                                     ProtocolIE-ID ::= 914
id-Cell-Frequency-List-LCR-MulFreq-Cell-SetupRqstTDD
                                                                     ProtocolIE-ID ::= 915
id-UARFCN-Adjustment
                                                                     ProtocolIE-ID ::= 916
id-Cell-Frequency-List-Information-LCR-MulFreq-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 917
id-Cell-Frequency-List-InformationItem-LCR-MulFreq-ResourceStatusInd
                                                                         ProtocolIE-ID ::= 918
id-UPPCHPositionLCR
                                                                     ProtocolTE-TD ::= 919
id-UPPCH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                                     ProtocolIE-ID ::= 920
id-UPPCH-LCR-InformationList-AuditRsp
                                                                     ProtocolTE-TD ::= 921
id-UPPCH-LCR-InformationItem-AuditRsp
                                                                     ProtocolIE-ID ::= 922
id-UPPCH-LCR-InformationList-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 923
id-UPPCH-LCR-InformationItem-ResourceStatusInd
                                                                     ProtocolIE-ID ::= 924
id-multipleFreq-dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst
                                                                         ProtocolIE-ID ::= 925
id-number-Of-Supported-Carriers
                                                                     ProtocolIE-ID ::= 926
id-multipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
                                                                     ProtocolIE-ID ::= 927
id-Unsuccessful-UARFCNItem-PSCH-ReconfFailureTDD
                                                                     ProtocolIE-ID ::= 928
id-multipleFreq-HS-DSCH-Resources-InformationList-AuditRsp
                                                                     ProtocolIE-ID ::= 929
id-multipleFreq-HS-DSCH-Resources-InformationList-ResourceStatusInd ProtocolIE-ID ::= 930
id-UARFCNSpecificCauseList
                                                                     ProtocolIE-ID ::= 931
id-tSN-Length
                                                                     ProtocolIE-ID ::= 932
id-MultipleFreg-DL-HS-PDSCH-Timeslot-Information-LCRItem-PSCH-ReconfRgst
                                                                            ProtocolIE-ID ::= 933
id-multicarrier-number
                                                                     ProtocolIE-ID ::= 934
id-Extended-HS-SCCH-ID
                                                                     ProtocolIE-ID ::= 935
id-Extended-HS-SICH-ID
                                                                     ProtocolIE-ID ::= 936
id-HSSICH-InfoExt-DM-Rgst
                                                                     ProtocolIE-ID ::= 937
id-Delete-From-HS-SCCH-Resource-PoolExt-PSCH-ReconfRgst
                                                                     ProtocolIE-ID ::= 938
id-HS-SCCH-InformationExt-LCR-PSCH-ReconfRgst
                                                                     ProtocolIE-ID ::= 939
id-HS-SCCH-InformationModifyExt-LCR-PSCH-ReconfRqst
                                                                     ProtocolIE-ID ::= 940
id-PowerControlGAP
                                                                     ProtocolIE-ID ::= 941
id-MBSFN-SpecialTimeSlot-LCR
                                                                     ProtocolTE-TD ::= 942
id-Common-MACFlows-to-DeleteFDD
                                                                     ProtocolIE-ID ::= 943
id-Paging-MACFlows-to-DeleteFDD
                                                                     ProtocolIE-ID ::= 944
id-E-TFCI-Boost-Information
                                                                     ProtocolIE-ID ::= 945
id-SixteenQAM-UL-Operation-Indicator
                                                                     ProtocolIE-ID ::= 946
id-SixtyfourQAM-UsageAllowedIndicator
                                                                     ProtocolIE-ID ::= 947
id-SixtyfourOAM-DL-UsageIndicator
                                                                     ProtocolIE-ID ::= 948
id-Default-Serving-Grant-in-DTX-Cycle2
                                                                     ProtocolIE-ID ::= 949
id-Maximum-Target-ReceivedTotalWideBandPower-LCR
                                                                     ProtocolIE-ID ::= 950
id-E-DPDCH-PowerInterpolation
                                                                     ProtocolIE-ID ::= 951
id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory
                                                                     ProtocolIE-ID ::= 952
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id-MultipleFreq-E-DCH-Resources-InformationList-AuditRsp	ProtocolIE-ID ::= 953
id-MultipleFreq-E-DCH-Resources-InformationList-ResourceStatusIn	
id-MultipleFreq-E-PUCH-Timeslot-InformationList-LCR-PSCH-ReconfF	
id-MultipleFreq-E-PUCH-Timeslot-Information-LCRItem-PSCH-ReconfF	
id-Extended-E-HICH-ID-TDD	ProtocolIE-ID ::= 957
id-ContinuousPacketConnectivityHS-SCCH-less-Deactivate-Indicator	
id-E-DCH-MACdPDU-SizeCapability	ProtocolIE-ID ::= 959
id-E-DCH-MACdPDUSizeFormat	ProtocolIE-ID ::= 960
id-MaximumNumber-Of-Retransmission-for-Scheduling-Info-LCRTDD	ProtocolIE-ID ::= 961
id-E-DCH-RetransmissionTimer-for-SchedulingInfo-LCRTDD	ProtocolIE-ID ::= 962
id-E-HICH-TimeOffset-Extension	ProtocolIE-ID ::= 963
id-MultipleFreq-E-HICH-TimeOffsetLCR	ProtocolIE-ID ::= 964
id-E-PUCH-PowerControlGAP	ProtocolIE-ID ::= 965
id-HSDSCH-TBSizeTableIndicator	ProtocolIE-ID ::= 966
id-E-DCH-DL-Control-Channel-Change-Information	ProtocolIE-ID ::= 967
id-E-DCH-DL-Control-Channel-Grant-Information	ProtocolIE-ID ::= 968
id-DGANSS-Corrections-Req	ProtocolIE-ID ::= 969
id-UE-without-HS-SCCH-constraint-indicator	ProtocolIE-ID ::= 970
id-AdditionalTimeSlotListLCR	ProtocolIE-ID ::= 971
id-AdditionalMeasurementValueList	ProtocolIE-ID ::= 972
id-E-AGCH-Table-Choice	ProtocolIE-ID ::= 978
id-PLCCH-parameters	ProtocolIE-ID ::= 981
id-E-RUCCH-parameters	ProtocolIE-ID ::= 982
id-E-RUCCH-768-parameters	ProtocolIE-ID ::= 983
id-HS-Cause	ProtocolIE-ID ::= 984
id-E-Cause	ProtocolIE-ID ::= 985
id-Common-EDCH-Capability	ProtocolIE-ID ::= 987
id-E-AI-Capability	ProtocolIE-ID ::= 988
<u> </u>	
id-Common-EDCH-System-InformationFDD	ProtocolIE-ID ::= 989
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990
<pre>id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD</pre>	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991
<pre>id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD</pre>	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992
<pre>id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information</pre>	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 997
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 999
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999
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id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enlanced-UE-DRX-Capability id-Enlanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-EarthOrientParaReq	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1001
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-EarthOrientParaReq id-GANSS-AddNavigationModelsReq	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-AddNavigationModelsReq id-GANSS-AddUTCModelsReq	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003 ProtocolIE-ID ::= 1004
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id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-BarthOrientParaReq id-GANSS-AddNavigationModelsReq id-GANSS-AddUTCModelsReq id-GANSS-AuxInfoReq id-GANSS-SBAS-ID	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003 ProtocolIE-ID ::= 1004 ProtocolIE-ID ::= 1004 ProtocolIE-ID ::= 1005 ProtocolIE-ID ::= 1005
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enlanced-UE-DRX-Capability id-Enlanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-AddIonoModelReq id-GANSS-AddNavigationModelsReq id-GANSS-AddUTCModelsReq id-GANSS-AddUTCModelsReq id-GANSS-SBAS-ID id-GANSS-SBAS-ID	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003 ProtocolIE-ID ::= 1004 ProtocolIE-ID ::= 1005 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1006
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id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-AddIonoModelReq id-GANSS-AddNavigationModelsReq id-GANSS-AddNavigationModelsReq id-GANSS-AuxInfoReq id-GANSS-BAS-ID id-GANSS-BAS-ID id-GANSS-Additional-Ionospheric-Model id-GANSS-Earth-Orientation-Parameters id-GANSS-Additional-Time-Models	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003 ProtocolIE-ID ::= 1004 ProtocolIE-ID ::= 1005 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1007 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1008
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-AddIonoModelReq id-GANSS-AddNavigationModelsReq id-GANSS-AddNavigationModelsReq id-GANSS-AdVITCModelsReq id-GANSS-AuxInfoReq id-GANSS-BAS-ID id-GANSS-Additional-Ionospheric-Model id-GANSS-Additional-Ionospheric-Model	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003 ProtocolIE-ID ::= 1004 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1007 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 1009
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-AddIonoModelReq id-GANSS-AddIvCModelsReq id-GANSS-AddIvCModelsReq id-GANSS-AddIvCModelsReq id-GANSS-BAS-ID id-GANSS-BAS-ID id-GANSS-BAS-ID id-GANSS-Barth-Orientation-Parameters id-GANSS-Additional-Ionospheric-Models id-GANSS-Additional-Navigation-Models id-GANSS-Additional-Navigation-Models id-GANSS-Additional-Navigation-Models id-GANSS-Additional-UTC-Models	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003 ProtocolIE-ID ::= 1004 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1007 ProtocolIE-ID ::= 1007 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 10010 ProtocolIE-ID ::= 10010 ProtocolIE-ID ::= 10010 ProtocolIE-ID ::= 10010
id-Common-EDCH-System-InformationFDD id-Common-UL-MACFlows-to-DeleteFDD id-Common-EDCH-MACdFlows-to-DeleteFDD id-Common-EDCH-System-Information-ResponseFDD id-Cell-ERNTI-Status-Information id-Enhanced-UE-DRX-Capability id-Enhanced-UE-DRX-InformationFDD id-TransportBearerRequestIndicator id-SixtyfourQAM-DL-MIMO-Combined-Capability id-E-RNTI id-MinimumReducedE-DPDCH-GainFactor id-GANSS-Time-ID id-GANSS-AddIonoModelReq id-GANSS-AddIonoModelReq id-GANSS-AddNavigationModelsReq id-GANSS-AddVCCModelsReq id-GANSS-AuxInfoReq id-GANSS-AuxInfoReq id-GANSS-BAS-ID id-GANSS-Additional-Ionospheric-Model id-GANSS-Earth-Orientation-Parameters id-GANSS-Additional-Time-Models id-GANSS-Additional-Time-Models	ProtocolIE-ID ::= 989 ProtocolIE-ID ::= 990 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 991 ProtocolIE-ID ::= 992 ProtocolIE-ID ::= 993 ProtocolIE-ID ::= 994 ProtocolIE-ID ::= 995 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 996 ProtocolIE-ID ::= 997 ProtocolIE-ID ::= 998 ProtocolIE-ID ::= 999 ProtocolIE-ID ::= 1000 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1002 ProtocolIE-ID ::= 1003 ProtocolIE-ID ::= 1004 ProtocolIE-ID ::= 1005 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1006 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1008 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 1009 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1001 ProtocolIE-ID ::= 1001

```
id-ERACH-CM-Rsp
                                                                    ProtocolIE-ID ::= 1015
id-ERACH-CM-Rprt
                                                                    ProtocolIE-ID ::= 1016
id-EDCH-RACH-Report-Value
                                                                    ProtocolIE-ID ::= 1017
id-EDCH-RACH-Report-IncrDecrThres
                                                                    ProtocolIE-ID ::= 1018
id-EDCH-RACH-Report-ThresholdInformation
                                                                    ProtocolIE-ID ::= 1019
id-E-DPCCH-Power-Boosting-Capability
                                                                    ProtocolIE-ID ::= 1020
id-HSDSCH-Common-System-InformationLCR
                                                                    ProtocolIE-ID ::= 1021
id-HSDSCH-Common-System-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1222
id-HSDSCH-Paging-System-InformationLCR
                                                                    ProtocolIE-ID ::= 1023
id-HSDSCH-Paging-System-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1024
id-Common-MACFlows-to-DeleteLCR
                                                                    ProtocolIE-ID ::= 1025
id-Paging-MACFlows-to-DeleteLCR
                                                                     ProtocolIE-ID ::= 1026
id-Common-EDCH-System-InformationLCR
                                                                    ProtocolIE-ID ::= 1027
id-Common-UL-MACFlows-to-DeleteLCR
                                                                    ProtocolIE-ID ::= 1028
id-Common-EDCH-MACdFlows-to-DeleteLCR
                                                                    ProtocolIE-ID ::= 1029
id-Common-EDCH-System-Information-ResponseLCR
                                                                    ProtocolIE-ID ::= 1030
id-Enhanced-UE-DRX-CapabilityLCR
                                                                    ProtocolIE-ID ::= 1031
id-Enhanced-UE-DRX-InformationLCR
                                                                    ProtocolIE-ID ::= 1032
id-HSDSCH-PreconfigurationSetup
                                                                    ProtocolIE-ID ::= 1033
                                                                    ProtocolIE-ID ::= 1034
id-HSDSCH-PreconfigurationInfo
id-NoOfTargetCellHS-SCCH-Order
                                                                    ProtocolIE-ID ::= 1035
id-EnhancedHSServingCC-Abort
                                                                    ProtocolIE-ID ::= 1036
id-Additional-HS-Cell-Information-RL-Setup
                                                                    ProtocolIE-ID ::= 1037
id-Additional-HS-Cell-Information-Response
                                                                    ProtocolIE-ID ::= 1038
id-Additional-HS-Cell-Information-RL-Addition
                                                                    ProtocolIE-ID ::= 1039
id-Additional-HS-Cell-Change-Information-Response
                                                                     ProtocolIE-ID ::= 1040
id-Additional-HS-Cell-Information-RL-Reconf-Prep
                                                                    ProtocolIE-ID ::= 1041
id-Additional-HS-Cell-Information-RL-Reconf-Reg
                                                                    ProtocolIE-ID ::= 1042
id-Additional-HS-Cell-Information-RL-Param-Upd
                                                                    ProtocolIE-ID ::= 1043
id-Multi-Cell-Capability-Info
                                                                    ProtocolIE-ID ::= 1044
id-IMB-Parameters
                                                                    ProtocolIE-ID ::= 1045
```

END

### 9.3.7 Container Definitions

```
IMPORTS
   maxProtocolExtensions,
   maxPrivateIEs,
   maxProtocolIEs,
   Criticality,
   Presence,
   PrivateIE-ID,
   ProtocolIE-ID
FROM NBAP-CommonDataTypes;
  ******************
-- Class Definition for Protocol IEs
__ ********************
NBAP-PROTOCOL-IES ::= CLASS {
   &id ProtocolIE-ID
                              UNIQUE,
   &criticality Criticality,
   &Value,
   &presence Presence
WITH SYNTAX {
   ID &id
   CRITICALITY &criticality
   TYPE
             &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
                &FirstValue
   FIRST TYPE
   SECOND CRITICALITY &secondCriticality
   SECOND TYPE
             &SecondValue
   PRESENCE
                &presence
```

```
-- Class Definition for Protocol Extensions
__ ********************
NBAP-PROTOCOL-EXTENSION ::= CLASS {
   &id ProtocolIE-ID
   &criticality Criticality,
   &Extension,
   &presence
                Presence
WITH SYNTAX {
   ID &id
   CRITICALITY &criticality
   EXTENSION &Extension
   PRESENCE
             &presence
  *****************
-- Class Definition for Private IEs
__ *********************
NBAP-PRIVATE-IES ::= CLASS {
   &id PrivateIE-ID,
   &criticality Criticality,
   &Value,
   &presence
                Presence
WITH SYNTAX {
       &id
   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}),
```

```
NBAP-PROTOCOL-IES.&criticality ({IEsSetParam}{@id}),
   value
             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
                       NBAP-PROTOCOL-IES-PAIR.&firstCriticality
                                                             ({IEsSetParam}{@id}),
                   NBAP-PROTOCOL-IES-PAIR.&FirstValue ({IEsSetParam}{@id}),
   firstValue
   secondCriticality
                       NBAP-PROTOCOL-IES-PAIR.&secondCriticality ({IEsSetParam}{@id}),
                    NBAP-PROTOCOL-IES-PAIR. & SecondValue ({IEsSetParam} { @id})
   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} ::=
   SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
   ProtocolExtensionField {{ExtensionSetParam}}
ProtocolExtensionField {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
          NBAP-PROTOCOL-EXTENSION.&id ({ExtensionSetParam}),
   criticality NBAP-PROTOCOL-EXTENSION.&criticality
                                              ({ExtensionSetParam}{@id}),
   extensionValue NBAP-PROTOCOL-EXTENSION. & Extension ({ExtensionSetParam}{@id})
  ******************
```

## 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:

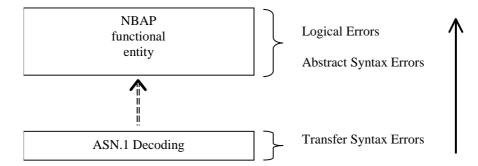


Figure 38: Protocol Errors in NBAP.

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 or

- b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more transport channels using the Radio Link is set to "no priority", the pre-emption vulnerability of the Radio Link shall be set to "not pre-emptable".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all the transport channels using the Radio Link is not set to "no priority", the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
  - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
  - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to "pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "pre-emptable". If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to "not pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "not pre-emptable".

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

## A.3 The Allocation/Retention Process

The Node B shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio Link to be established or modified. The Allocation Information is derived according to clause A.1.
- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the cell.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- -. If the pre-emption capability for a Radio Link to be established or modified is set to "may trigger preemption" and the resource situation so requires, the Node B may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- -. If the pre-emption capability for a Radio Link to be established or modified is set to "shall not trigger preemption", then this allocation request shall not trigger the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to "pre-emptable", then this Radio Link shall be included in the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to "not pre-emptable", then this Radio Link shall not be included in the pre-emption process in clause A.4.

## A.4 The Pre-emption Process

The pre-emption process shall only pre-empt Radio Links with lower retention priority than the allocation priority of the Radio Link to be established or modified. The Radio Links to be pre-empted shall be selected in ascending order of the retention priority.

When the pre-emption process detects that one or more Radio Links have to be pre-empted to free resources for a Radio Link(s) to be established or modified, the Node B shall initiate the Radio Link Pre-emption procedure for all the Node B Communication Contexts having Radio Links selected for pre-emption and start the  $T_{Preempt}$  timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the Node B shall stop the  $T_{Preempt}$  timer and complete the procedure that triggered the pre-emption process in accordance with the "Successful Operation" subclause of the procedure.

If the T<sub>Preempt</sub> timer expires, the Node B shall regard the procedure that triggered the pre-emption process as failed and complete the procedure in accordance with the "Unsuccessful Operation" subclause of the procedure.

# Annex B (informative): Measurement Reporting

When the *Report Characteristics* IE is set to "Event A" (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

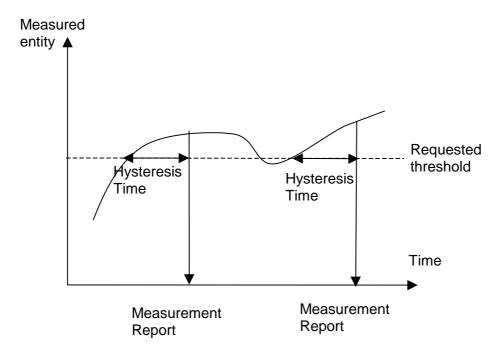


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event B" (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

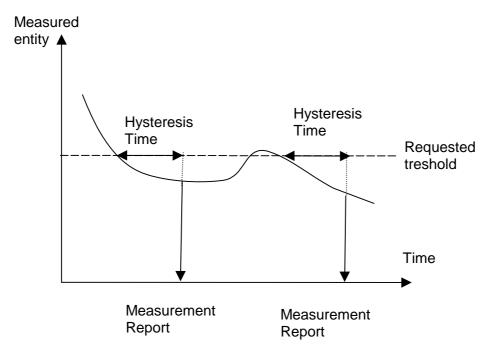


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event C" (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

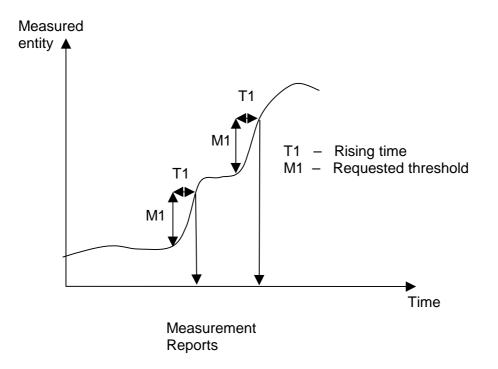


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to "Event D" (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

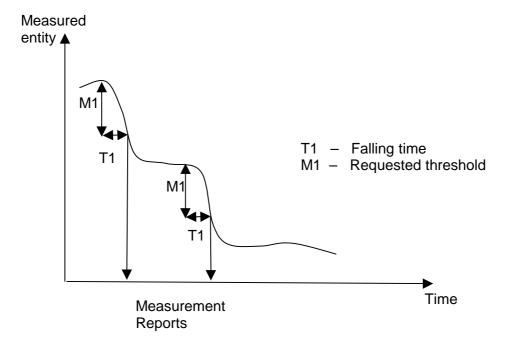


Figure B.4: Event D reporting

When the *Report Characteristics* IE is set to "Event E" (figure B.5), the Measurement Reporting procedure (Report A) is initiated always when the measured entity rises above the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.5). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity falls below the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity falls below the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

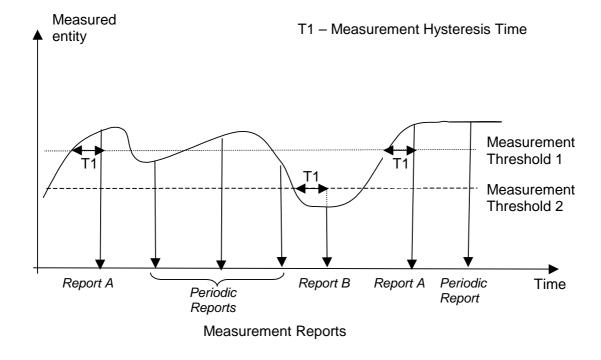
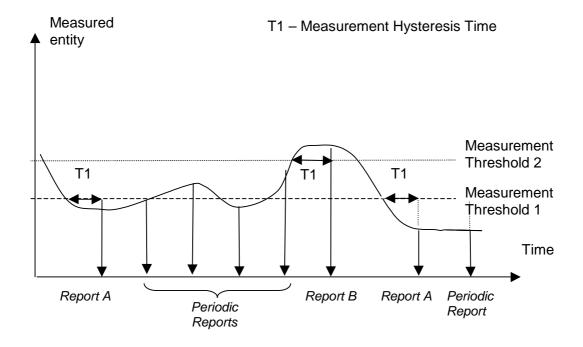


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to "Event F" (figure B.6), the Measurement Reporting procedure (Report A) is initiated always when the measured entity falls below the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.6). If *Report Periodicity* IE is provided Node B shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity rises above the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity rises above the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.



Measurement Reports

Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

## Annex C (informative): Guidelines for Usage of the Criticality Diagnostics IE

## C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description		Criticality
			Referenc			
			е			
Message Type	M				YES	reject
Transaction ID	M				_	
Α	M				YES	reject
В	M				YES	reject
>E		1 <maxe></maxe>			EACH	ignore
>>F		1 <maxf></maxf>			_	
>>>G		03,			EACH	ignore
>>H		1 <maxh></maxh>			EACH	ignore
>>>G		03,			EACH	ignore and
						notify
>>G	M				YES	reject
>>J		1 <maxj></maxj>			_	
>>>G		03,			EACH	reject
С	M				YES	reject
>K		1 <maxk></maxk>			EACH	ignore and
						notify
>>L		1 <maxl></maxl>			_	
>>>M	0				_	
D	M				YES	reject

Note 1. The IEs F, J, and L do not have assigned criticality. The IEs F, J, and L are consequently realised as the ASN.1 type SEQUENCE OF of "ordinary" ASN.1 type, e.g. INTEGER. On the other hand, the repeatable IEs with assigned criticality are realised as the ASN.1 type SEQUENCE OF of an IE object, e.g. ProtocolIE-Single-Container.

For the corresponding ASN.1 layout, see subclause C.4.

## C.2 Example on a Received EXAMPLE MESSAGE

Assume further more that a received message based on the above tabular format is according to the figure below.

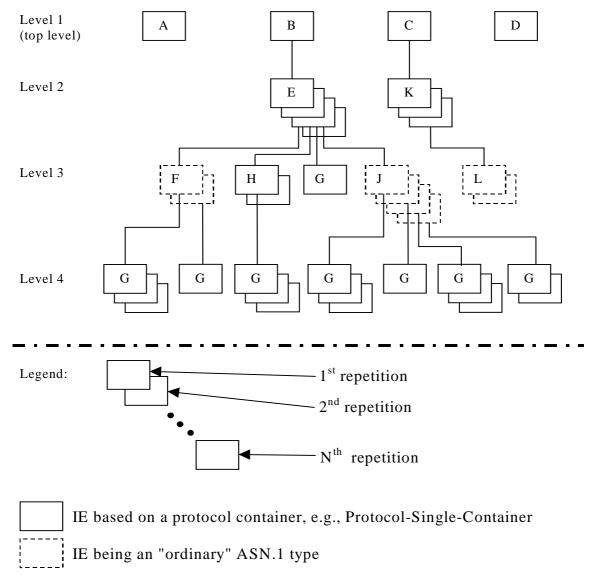
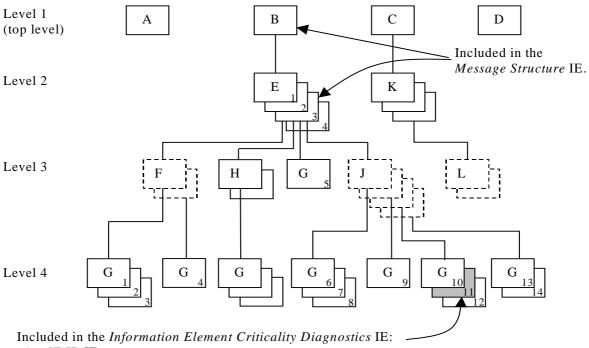


Figure C.1: Example of content of a received NBAP message based on the EXAMPLE MESSAGE

## C.3 Content of Criticality Diagnostics

## C.3.1 Example 1



- a) IE ID IE
- b) Repetition Number IE

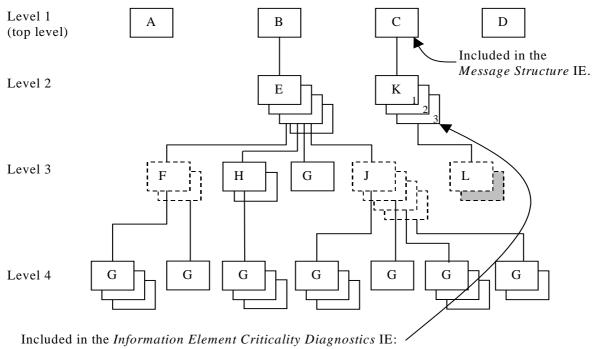
Figure C.2: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment				
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.				
IE ID	id-G	E 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 Structure, first repetition						
>IE ID	id-B	IE ID from level 1.				
Message Structure, second repetition						
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.				
>Repetition	3	Repetition number from the lowest level above the reported level, i.e. level 2.				
Number						

- Note 2. The IE J on level 3 cannot be included in the *Message Structure* IE since they have no criticality of their own.
- Note 3. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

## C.3.2 Example 2



- a) IE ID IE
- b) Repetition Number IE

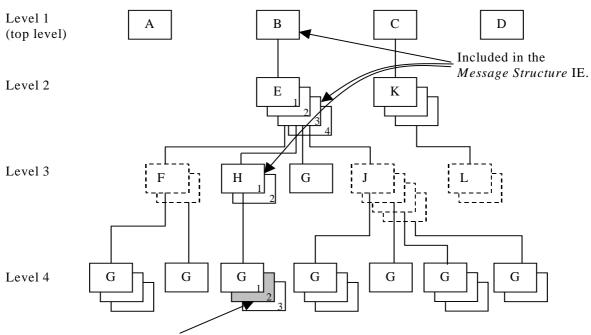
Figure C.3: Example of a received NBAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore and notify	Criticality for IE on the reported level, i.e. level 2.
IE ID	id-K	IE ID from the reported level, i.e. level 2.
Repetition Number	3	Repetition number on the reported level, i.e. level 2.
Type of Error	not underst ood	
Message 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

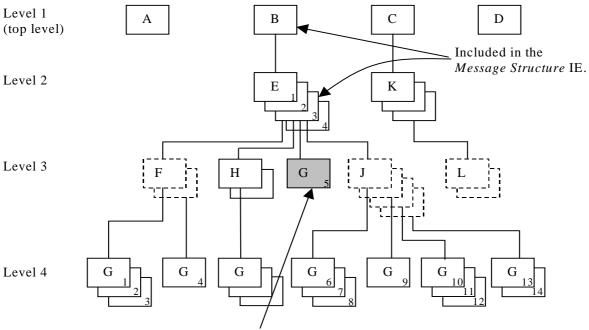
Figure C.4: Example of a received NBAP message containing a not comprehended IE

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

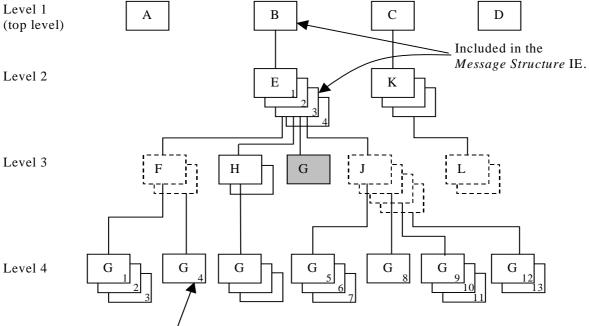
Figure C.5: Example of a received NBAP message containing a not comprehended IE

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 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 6. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

#### C.3.5 Example 5



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

Figure C.6: Example of a received NBAP message with a missing IE

If the instance marked as grey in the IE G in the IE E shown in the figure C.6 above, is missing this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition Number	4	Repetition number up to the missing IE on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE there have been four occurrences of IE G within the IE E (level 2) up to the missing occurrence.
Type of Error	missing	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	e, 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,
    \verb|ie-Extensions| & ProtocolExtensionContainer { {B-ExtIEs}} & OPTIONAL, \\
B-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
 \hbox{E-List} ::= \hbox{SEQUENCE (SIZE (1..maxE)) OF ProtocollE-Single-Container { } \{\hbox{E-IEs}\} \ } 
E-IES NBAP-PROTOCOL-IES ::= {
   { ID id-E CRITICALITY ignore TYPE E PRESENCE mandatory }
E ::= SEQUENCE {
    h
                     H-List,
    q
                      G-List1.
                      J-List,
    iE-Extensions ProtocolExtensionContainer { {E-ExtIEs} } OPTIONAL,
}
E-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
F-List ::= SEQUENCE (SIZE (1..maxF)) OF F
F ::= SEQUENCE {
                      G-List2 OPTIONAL.
    iE-Extensions ProtocolExtensionContainer { {F-ExtIEs} } OPTIONAL,
          NBAP-PROTOCOL-EXTENSION ::= {
F-ExtIEs
 \mbox{G-List2} ::= \mbox{SEQUENCE (SIZE (1...3, ...)) OF Protocolle-Single-Container } \{ \mbox{ } \{\mbox{G2-IEs} \} \mbox{ } \} 
G2-IES NBAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY ignore TYPE G PRESENCE mandatory }
H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }
H-IES NBAP-PROTOCOL-IES ::= {
    H ::= SEQUENCE {
                      G-List3 OPTIONAL,
                                        ProtocolExtensionContainer { {H-ExtIEs} } OPTIONAL,
    iE-Extensions
H-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { {G3-IEs} }
G3-IES NBAP-PROTOCOL-IES ::= {
  { ID id-G CRITICALITY notify TYPE G PRESENCE mandatory }
G-List1 ::= ProtocolIE-Single-Container { {G1-IEs} }
G1-IES NBAP-PROTOCOL-IES ::= {
   J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J
J ::= SEQUENCE {
                 G-List4 OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
J-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G4-IEs} }
G4-IES NBAP-PROTOCOL-IES ::= {
  { ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
C ::= SEQUENCE {
   k
                 K-List,
   iE-Extensions ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
C-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }
K-IES NBAP-PROTOCOL-IES ::= {
   K ::= SEQUENCE {
                 L-List,
   iE-Extensions ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
K-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
L-List ::= SEQUENCE (SIZE (1..maxL)) OF L
L ::= SEQUENCE {
                 M OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
L-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ExampleMessage-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

# Annex D (normative): IB\_SG\_DATA Encoding

### D.1 Overall Description

There exist two variants for encoding *IB\_SG\_DATA* IE (see section 9.2.1.32), which are detailed in subsections below. To avoid incorrect transmission of System Information on Uu, the following behaviour is required:

- For each Iub, CRNC shall use the encoding variant supported by the Node B for the *IB\_SG\_DATA* IE (see section 9.2.1.32) when sending the SYSTEM INFORMATION UPDATE REQUEST message to the Node B. This is supported by configuration in the CRNC.

## D.2 IB\_SG\_DATA Encoding Variant 1

This variant corresponds to the algorithm, that ASN.1 length encoding for the conveyed SIB segment is performed by the RNC. Building of IB\_SG\_DATA segments involves two steps:

- 1) Segmentation of MIB/SIB/SB and
- 2) RRC encoding of the segments, which includes the PER encoding of the length in case of "SIB data variable".

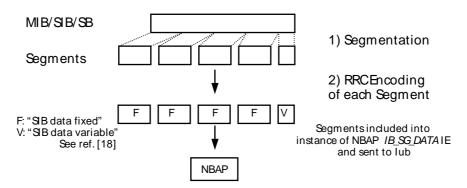


Figure D.1: The Building of Segments

### D.3 IB\_SG\_DATA Encoding Variant 2

This variant corresponds to the algorithm, that ASN.1 length encoding for the conveyed segment is not performed by the RNC. Segments are built in the CRNC by segmentation of a MIB/SIB/SB.

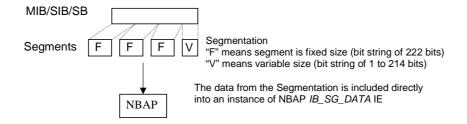


Figure D.2: The Building of Segments

# Annex E (informative): Reporting the status of resources used for frequency (1.28 Mcps TDD only)

For a multi-frequency cell, the Local Cell represents the resources in the Node B that can be used for the configuration of a number of frequencies in the cell. The resources for a frequency in Node B are defined as FPM (Frequency Process Module) and is identified by FPM ID.

In the Cell Setup procedure, RNC should configure FPM for each frequency by including *FPM ID* IE in the CELL SETUP REQUEST message.

In the Cell Reconfiguration procedure, RNC should configure FPM for each added frequency by including *FPM ID* IE in the CELL RECONFIGURATION REQUEST message.

In Audit procedure, the Node B should include the *FPM* ID IE and the *Local Cell ID* IE in the *Local Cell Information* IE to report the status of a FPM in the AUDIT RESPONSE message.

In Resource Status Indication procedure, the Node B should include the *FPM ID* IE and the *Local Cell ID* IE in the *Local Cell Information* IE to report the status of a FPM in the RESOURCE STATUS INDICATION message.

# Annex F (informative): Change history

					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

		_			Change history		
Date	TSG #	TSG Doc.	CR	Re v	Subject/Comment	Old	New
March 01	11	RP-010160	373,3 87		Approved at TSG RAN #11 and placed under Change Control	-	4.0.0
March 01	11	RP-010166	361		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, 406		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	449,4 56,46 2,464, 467		Approved at TSG RAN #12	4.0.0	4.1.0
06/2001	12	RP-010396	413,4 14,41 5,416, 417,4 18,41 9,450, 451,4 52,45 3,454,		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	472	_	Correction to Information Block Deletion	4.1.0	4.2.0
09/2001	13	RP-010587	476		Clarification of the AICH power	4.1.0	4.2.0
09/2001	13	RP-010587	479	1	Transport bearer replacement clarification	4.1.0	4.2.0
09/2001	13	RP-010587	481	1	Corrections to the PDSCH Code Mapping IE	4.1.0	4.2.0
09/2001	13	RP-010587	484	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 13	RP-010587	486		Correct max Codes discrepancy between tabular and ASN.1	4.1.0	4.2.0
09/2001 09/2001	13	RP-010587 RP-010587	488 491	1	S-CCPCH Corrections for TDD  Nbap criticality	4.1.0	4.2.0
09/2001	13	RP-010588	500	1	Clarification of Abnormal Conditions/Unsuccessful Operation	4.1.0	4.2.0
09/2001	13	RP-010588	504		Error handling of erroneously present conditional IEs	4.1.0	4.2.0
09/2001	13	RP-010588	507	1	Correction for maxNrOfCPCHs	4.1.0	4.2.0
09/2001	13	RP-010588	509	1	Correction for N_EOT	4.1.0	4.2.0
09/2001	13	RP-010588	513		Bitstrings ordering	4.1.0	4.2.0
09/2001	13	RP-010588	517		Mapping of TFCS to TFCI	4.1.0	4.2.0
09/2001	13 13	RP-010588	519		Correction of implementation of RAN#12 CRs	4.1.0	4.2.0
09/2001 09/2001	13	RP-010588 RP-010588	521 524	1	TDD Channelisation code range definition  Clarification of chapter 10	4.1.0	4.2.0
09/2001	13	RP-010588	526	-	Clarification of use of Diversity Control Indicator	4.1.0	4.2.0
09/2001	13	RP-010588	528	3	Clarification of coordinated DCHs	4.1.0	4.2.0
09/2001	13	RP-010599	468	2	Allowed Combinations of Dedicated Measurement Type and the Reporting Characteristics Type	4.1.0	4.2.0
09/2001	13	RP-010599	470		Support of 8PSK modulation for LCR TDD	4.1.0	4.2.0
09/2001	13	RP-010599	473		DPC Mode in Radio Link Addition procedure	4.1.0	4.2.0
09/2001	13	RP-010599	475	_	Correction on NBAP function	4.1.0	4.2.0
09/2001	13	RP-010599	498	1	Adding protocol container in CHOICE type IE	4.1.0	4.2.0
09/2001 09/2001	13 13	RP-010599 RP-010599	501 515	1	Clarification of Abnormal Conditions/Unsuccessful Operation Corrections to position reporting	4.1.0	4.2.0
09/2001	13	131 -010399	515	1	CR to 25.433 v4.1.0: RX timing deviation as dedicated	4.1.0	4.2.0
30,2001		RP-010599	518	2	measurement for 1.28Mcps TDD		0

09/2001	13	RP-010599	522	1	Clarification on the Time Slot LCR	4.1.0	4.2.0
10/2001	-	-	-	-	Editorial correction to correct the header	4.2.0	4.2.1
12/2001	14	RP-010897	530	2	CR on Priority range	4.2.1	4.3.0
12/2001	14	RP-010862	534		Bitstrings ordering	4.2.1	4.3.0
12/2001	14	RP-010862	536		Added UTRAN modes in the IE Type and Reference and Semantics Description in IEs in NBAP messages	4.2.1	4.3.0
12/2001	14	KF-010002	550		Alignment to RAN4 spec for Transmitted Code Power	4.2.1	4.3.0
12/2001	14	RP-010862	538		Measurement	4.2.1	4.3.0
12/2001	14		540		Correction the Clause 10 Error Handling	4.2.1	4.3.0
12/2001	14		542		Clarification of TrCh Ordering in TFCS	4.2.1	4.3.0
12/2001	14	RP-010862	544		Addition of SIB15.4 and SIB18 to tabular	4.2.1	4.3.0
12/2001	14	RP-010862	550		Transmit Diversity for TDD	4.2.1	4.3.0
12/2001	14	RP-010862	552		Clarification for the definition of the ASN.1 constants	4.2.1	4.3.0
12/2001	14	RP-010862	559	1	Terminology Corrections	4.2.1	4.3.0
12/2001	14	RP-010863	560	1	Rel-4 specific terminology corrections	4.2.1	4.3.0
12/2001	14	RP-010863	562		Procedure Code Criticality in Error Indication	4.2.1	4.3.0
12/2001	14		565		Clarification for the Power Adjustment Type IE in the DL POWER CONTROL REQUEST message	4.2.1	4.3.0
12/2001	14		567	1	Forward Compatibility for DL Power Balancing	4.2.1	4.3.0
12/2001	14		569		Reconfiguration clarification	4.2.1	4.3.0
12/2001	14		571	2	Addition of amendment to clarify the PER encoding of bitstrings	4.2.1	4.3.0
12/2001	14	RP-010863	575	2	Transport Bearer replacement clarification for the DSCH case	4.2.1	4.3.0
12/2001	14	RP-010863	577		Clarification of the Transaction ID	4.2.1	4.3.0
12/2001	14	RP-010863 RP-010863	579 582	1	CPCH-related corrections	4.2.1	4.3.0
12/2001 12/2001	14	RP-010863 RP-010874	546	1	Correction of S field length  Correction of drift rate resolution	4.2.1	4.3.0
12/2001	14	RP-010874	547	!	Cell Parameter ID IE definition for 1.28Mcps TDD	4.2.1	4.3.0
12/2001	14	1010074	547		Amendment of the RADIO LINK ADDITION RESPONSE TDD	4.2.1	4.3.0
12/2001		RP-010874	548		message for LCR TDD	7.2.1	7.0.0
12/2001	14	RP-010874	580	2	SFN-SFN quality indication	4.2.1	4.3.0
12/2001	14	RP-010912	545	1	Correction to SFN-SFN Observed Time Difference Measurement report mapping	4.2.1	4.3.0
03/2002	15	1 0.00.12	0.0	Ė	Incorrect Physical Shared Channel TDD Procedure definition in	4.3.0	4.4.0
		RP-020174	591	1	ASN.1		
03/2002	15	DD 000474	500		Removal of criticality information for Transaction ID in the ERROR	4.3.0	4.4.0
00/0000	45	RP-020174	593		INDICATION message	100	1 1 0
03/2002	15 15	RP-020174	600		Clarification to measurement unit at Higher Layer Filtering.  Correction of the Limited Power Increase in Synchronised Radio	4.3.0	4.4.0
03/2002	13	RP-020174	605		Link Reconfiguration Preparation	4.3.0	4.4.0
03/2002	15	RP-020174	623	1	Correction to physical channels which SCTD can be applied (lub)	4.3.0	4.4.0
03/2002	15	RP-020182	585		Corrections to the Information Exchange Initiation procedure	4.3.0	4.4.0
03/2002	15	RP-020182	586	1	Correction to UE position measurements quality and threshold information	4.3.0	4.4.0
03/2002	15	RP-020182	587	1	Correction to UE position measurements change and deviation limit	4.3.0	4.4.0
					formulas		
03/2002	15	RP-020182	601	1	Modification of the T_utran-gps length	4.3.0	4.4.0
03/2002	15	RP-020182	606		Amendment of the COMMON MEASUREMENT INITIATION	4.3.0	4.4.0
03/2002	15	KF-020162	808		REQUEST message	4.3.0	4.4.0
03/2002	15	RP-020182	609	1	ASN.1 and tabular amendments for LCR TDD	4.3.0	4.4.0
00/000	145	DD 000105	2:-	ļ	Mid-mid-shift OD is the DUNGON ON INTER COMMITTEE	100	
03/2002	15	RP-020182	610		Midamble shift LCR in the PHYSICAL SAHRED SCHANNEL RECONFIGURATION REQUEST [TDD] message	4.3.0	4.4.0
					TRECONTION NEWSEUT [TDD] message		
03/2002	15	RP-020182	617		NBAP Rapporteur corrections	4.3.0	4.4.0
03/2002	15	RP-020231	628	2	Removing of channel coding option "no coding" for FDD	4.3.0	4.4.0
03/2002	15	RP-020231 RP-020188	425	4	DL Power Capability as a shared resource between Cells	4.4.0	5.0.0
03/2002	15	131 -020100	723	7	Power Balancing Activation with Radio Link Setup and Radio Link	4.4.0	5.0.0
00/2002	10	RP-020188	496	4	Addition procedures in NBAP	7.4.0	0.0.0
03/2002	15				Power Balancing Restart with Radio Link Reconfiguration	4.4.0	5.0.0
		RP-020188	497	3	procedure in NBAP		
03/2002	15				Initial DL Power After addition of CCTrCH in Synchronized	4.4.0	5.0.0
00/005	1.5	RP-020188	502	2	Reconfiguration	1	
03/2002	15	RP-020194	583		NBAP Signalling support for flexible hard split	4.4.0	5.0.0
03/2002	15	RP-020193	584	3	Add IPDL parameters for LCR TDD in CELL SETUP REQUEST and CELL RECONFIGURATION REQUEST in NBAP message.	4.4.0	5.0.0
03/2002	15		588	1	Re-arrangement of lub Transport Bearers	4.4.0	5.0.0
03/2002	15		589	2	HSDPA NBAP Common Procedure Modifications	4.4.0	5.0.0

03/2002	15	RP-020189	597	2	Introduction of IP Transport option in UTRAN	4.4.0	5.0.0
03/2002	15	RP-020188	598		Introduction separate max PDSCH power limitation	4.4.0	5.0.0
03/2002	15	RP-020199	602	2	Separation of Resource Reservation and Radio Link Activation	4.4.0	5.0.0
03/2002	15	RP-020196	603		Introduction of RL Timing Adjustment support	4.4.0	5.0.0
03/2002	15				Introduction of the Neighbouring TDD Cell Measurement	4.4.0	5.0.0
		RP-020193	607	1	Information LCR		
03/2002	15	RP-020191	608	2	Node B synchronisation for 1.28Mcps TDD	4.4.0	5.0.0
03/2002	15	RP-020190	612	3	HSDPA RL-Level Signalling for TDD & FDD	4.4.0	5.0.0
03/2002	15				Introduction of Angle of Arrival enhanced UE positioning for	4.4.0	5.0.0
		RP-020193	613	1	1.28Mcps TDD in NBAP		
03/2002	15	RP-020194	626		NBAP changes for TFCI power control in DSCH hard split mode	4.4.0	5.0.0
06/2002	16	RP-020412	595	3	Introduction of Qth signalling in UTRAN	5.0.0	5.1.0
06/2002	16	RP-020412	633		Criticality Information Decoding Failure Handling	5.0.0	5.1.0
06/2002	16	RP-020412	636	1	Alignment of tabular and ASN.1 coding for DL power	5.0.0	5.1.0
06/2002	16	RP-020412	639	1	Correction to RL Restore Indication	5.0.0	5.1.0
06/2002	16	RP-020412	648		Use of PDSCH RL ID for TDD DSCH/USCH	5.0.0	5.1.0
06/2002	16	RP-020412	652		Clarification on the Neighboring TDD Cell Measurement information	5.0.0	5.1.0
06/2002	16	RP-020412	654		Introduction of SIB	5.0.0	5.1.0
06/2002	16	RP-020412	655		Removal of syntax errors from ASN.1	5.0.0	5.1.0
06/2002	16	RP-020412	656		Interaction between HSDPA and IP transport in UTRAN	5.0.0	5.1.0
06/2002	16	RP-020412	658	1	Interaction between HSDPA and Bearer Re-arrangement	5.0.0	5.1.0
06/2002	16	RP-020412	659		Correction to Implementation of Rel-5	5.0.0	5.1.0
06/2002	16				Correction to the use of the CFN IE / SFN IE in the Measurement	5.0.0	5.1.0
		RP-020412	662		Initiation procedures		
06/2002	16	RP-020412	665		TFCI 0 definition for TDD	5.0.0	5.1.0
06/2002	16	RP-020412	670	1	NBAP Review – Alignment on the ASN.1	5.0.0	5.1.0
06/2002	16	RP-020412	672	1	NBAP Review Alignment of the ASN.1	5.0.0	5.1.0

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	686	1	Clarification for the usage of the cause value	5.0.0	5.1.0
06/2002	16	RP-020412	693	2	HS-DSCH Initial credits F	5.0.0	5.1.0
06/2002	16	RP-020412	698	1	TFCI2 bearer clarification	5.0.0	5.1.0
09/2002	17	RP-020612	706		WG4 Reference Corrections	5.1.0	5.2.0
09/2002	17	RP-020614	708		Rx Timing Deviation (TDD) corrections	5.1.0	5.2.0
09/2002	17	RP-020616	710		Clarification on the Common Measurement Reporting procedure	5.1.0	5.2.0
09/2002	17	RP-020628	711	1	Correction of HSDPA Common Configuration	5.1.0	5.2.0
		RP-020628		1			
09/2002	17		712	ļ.	TFCI2 Bearer correction for IP transport	5.1.0	5.2.0
09/2002	17	RP-020628	686	1	Partial dedicated measurement reporting	5.1.0	5.2.0
09/2002	17	RP-020647	713	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	715	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	717	1	Correction for inconsistency in length of TFCI field 3	5.1.0	5.2.0
09/2002	17	RP-020629	514		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 <sub>SIR</sub> (k) by P <sub>curr</sub> in 25.423	5.1.0	5.2.0
09/2002	17	RP-020623	725	1	RL Parameter Update Procedure	5.1.0	5.2.0
09/2002	17	RP-020630	727	2	IP offset correction	5.1.0	5.2.0
09/2002	17		729			5.1.0	5.2.0
		RP-020613		2	Uplink Synchronisation in 1.28Mcps TDD		
09/2002	17	RP-020609	733	2	Modification of PICH Parameters LCR TDD	5.1.0	5.2.0
09/2002	17	RP-020604	739	1	Handling of conflicting specification text	5.1.0	5.2.0
09/2002	17	RP-020609	741	1	Correction to the specification of Optional IEs	5.1.0	5.2.0
12/2002	18	RP-020754	747		Alignment of Error Indication procedure text to the latest RNSAP	5.2.0	5.3.0
12/2002	18	RP-020758	749		Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD	5.2.0	5.3.0
12/2002	18	RP-020757	751		Correction to RX Timing Deviation LCR value range	5.2.0	5.3.0
12/2002	18	RP-020759	753	2	Slot Format for 1.28Mcps TDD	5.2.0	5.3.0
12/2002	18	RP-020754	755		SYNC_DL_Code ID for 1.28Mcps TDD	5.2.0	5.3.0
12/2002	18	RP-020773	756	1	Measurement power offset signalling for HSDPA	5.2.0	5.3.0
12/2002	18	RP-020768	757	Ė	Power offset values for HS-DPCCH	5.2.0	5.3.0
12/2002	18	RP-020855	764	3	MAC-hs Window Size	5.2.0	5.3.0
12/2002	18	RP-020754	767	1	Clarification on the Minimum Spreading Factor for TDD	5.2.0	5.3.0
12/2002	18	RP-020767	770	1	Addition of the second TDD Channelisation Code of HS-SCCH for the 1.28Mcps TDD option.	5.2.0	5.3.0
10/2002	18	RP-020765	772	1		5.2.0	F 2 0
12/2002				1	Clarification of the usage of HS-DSCH-RNTI		5.3.0
12/2002 12/2002	18 18	RP-020754 RP-020763	780 781		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
40/0000	40	DD 000744	70.5	-	Indicator IE	F 0 0	5.3.0
12/2002	18	RP-020744		-	Correction for the DL DPDCH transmission	5.2.0	
03/2003	19	RP-030068	791		Clarification to DL Power definition for TDD	5.3.0	5.4.0
03/2003	19	RP-030077	792	3	Correction to DL Tx Power for TDD	5.3.0	5.4.0
03/2003	19	RP-030072	794		TPC Step Size for TDD	5.3.0	5.4.0
03/2003	19	RP-030069	796		Clarification to 2nd Interleaving Mode for TDD	5.3.0	5.4.0
03/2003	19	RP-030063	797	2	HS-PDSCH Code and Timeslot Resource Assignment for TDD	5.3.0	5.4.0
03/2003	19	RP-030078	798	1	HS-PDSCH NBAP Corrections for TDD	5.3.0	5.4.0
03/2003	19	RP-030073	800	1	Clarification of HS-SCCH power offset usage in case of multiple HS-SCCHs	5.3.0	5.4.0
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	803	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
03/2003	19	RP-030070	808	ť	Correction for the Information Exchange Initiation procedure	5.3.0	5.4.0
03/2003	19	RP-030070	809	1	T1 signalling for HSDPA	5.3.0	5.4.0
		_		+			
03/2003	19	RP-030071	811	1	Midamble Configuration for Midamble Shift LCR	5.3.0	5.4.0
03/2003	19	RP-030066	818	1	Corrections to DCH Combining in RL SETUP and RL ADDITION	5.3.0	5.4.0
03/2003	19	RP-030059	823	<u> </u>	Correction of PRACH Midamble for 1.28Mcps TDD	5.3.0	5.4.0
03/2003	19	RP-030076	827	2	Guaranteed Bit Rate for HSDPA	5.3.0	5.4.0
06/2003	20	RP-030332	833	$oldsymbol{ol}}}}}}}}}}}}}}}}$	Alignment of TDD HSDPA parameters to RAN2 and RAN 1.	5.4.0	5.5.0
06/2003	20	RP-030278	834		Non HSDPA Code Power Measurement for TDD	5.4.0	5.5.0
06/2003	20	RP-030333	835	1	HSDPA General Corrections	5.4.0	5.5.0
06/2003	20	RP-030320	840		Alignment of maximum HS DSCH code numbers to 25.211	5.4.0	5.5.0
06/2003	20	RP-030320	841	t	Correction in the tabular format of the CELL SYNCHRONISATION	5.4.0	5.5.0
					REPORT [TDD] message		
	20	RP-030320	842	1	Clarification of optional IEs for Node B synchronisation for LCR TDD	5.4.0	5.5.0
06/2003							
06/2003	20	RP-030334	843		TDD Channelisation Code LCR correction for HSDPA	5.4.0 5.4.0	5.5.0

06/2003	20	RP-030329	850	1	HS-SCCH Change Indicator	5.4.0	5.5.0
06/2003	20	RP-030335	854		Correction to HARQ Memory Partitioning	5.4.0	5.5.0
06/2003	20	RP-030337	855		Correction for the value range of 'CQI Feedback cycle, k'	5.4.0	5.5.0
06/2003	20	RP-030336	856	1	Clarification for the handling of the HS-DSCH	5.4.0	5.5.0
06/2003 06/2003	20	RP-030320 RP-030328	857 859	2	Clarification of SCCPCH maximum power for TDD  Resource handling of HS-DSCH Guaranteed Bit Rate	5.4.0 5.4.0	5.5.0
06/2003	20	RP-030324	862	_	Alignment of the Requested Data Value Information IE description	5.4.0	5.5.0
06/2003	20	RP-030320	865		HS-SCCH Code deletion/replacement with Physical Shared	5.4.0	5.5.0
00/2000	20	111 000020	000		Channel Reconfiguration	0.4.0	0.0.0
06/2003	20	RP-030326	867		Correction of Failure message used for logical errors	5.4.0	5.5.0
09/2003	21	RP-030451	868	2	Discard timer signalling for HSDPA	5.5.0	5.6.0
09/2003	21	RP-030452	869	1	Phase Reference Signalling Support	5.5.0	5.6.0
09/2003	21	RP-030449	874	2	HS-DSCH Priority Queue to Modify	5.5.0	5.6.0
09/2003	21	RP-030536	875	2	MAC-hs Reordering Buffer Size	5.5.0	5.6.0
09/2003	21	RP-030441	876	1	Correction of HS-SCCH Code IE	5.5.0	5.6.0
09/2003	21	RP-030441	877	1	Power configuration of PDSCH for TDD	5.5.0	5.6.0
09/2003	21	RP-030443	881		Corrections to Tx Diversity	5.5.0	5.6.0
09/2003	21	RP-030444	884		'On Modification' and 'Periodic' reporting alignment for Information Exchange procedures	5.5.0	5.6.0
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
09/2003	21	RP-030446	887	1	Removal of the note in chapter 10	5.5.0	5.6.0
09/2003	21	RP-030441	888	1	Correction for the start code number of HS-PDSCH	5.5.0	5.6.0
09/2003	21	RP-030447	890	2	Coordination with RRC about the TFS of DL DCH for HS-DSCH	5.5.0	5.6.0
09/2003	21	RP-030453	893	2	HS-DSCH information usage description correction	5.5.0	5.6.0
09/2003	21	RP-030441	894		Correction of CR 609 implementation error on definition of end of audit sequence indicator and dwPCH power	5.5.0	5.6.0
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	900	1	Correction of wrong number in GPS Timing calculation	5.6.0	5.7.0
12/2003	22	RP-030687	901	i -	Correction for the HS-DSCH Initial Capacity Allocation	5.6.0	5.7.0
12/2003	22	RP-030688	902		Correction of Backward Compatibility for Uni-directional DCH	5.6.0	5.7.0
					indicator		
12/2003	22	RP-030692	903		Reconfiguration of Multiple Radio Links in TDD	5.6.0	5.7.0
12/2003	22	RP-030693	904		The usage of the MAC-hs Reordering Buffer Size	5.6.0	5.7.0
12/2003	22	RP-030679	907		Correction for the Dedicated Measurement procedure with all Node B Communication Context	5.6.0	5.7.0
12/2003	22	RP-030674	913		Correction of the repetition name for 1.28Mcps TDD in the RADIO LINK RECONFIGURATION PREPARE TDD message	5.6.0	5.7.0
12/2003	22	RP-030674	915	1	Correction of Node B synchronisation procedures	5.6.0	5.7.0
12/2003	22	RP-030674	917		Correction of the ProtocollE-Single-Containers in ASN.1 for TDD	5.6.0	5.7.0
12/2003	22	RP-030674	919		ASN.1 corrections for 1.28Mcps TDD	5.6.0	5.7.0
12/2003	22	RP-030679	920	1	TDD-Review Corrections for NBAP Rel-5	5.6.0	5.7.0
12/2003	22	RP-030691	921	1	Range Extension for GPS Almanac Reporting	5.6.0	5.7.0
12/2003	22	RP-030713	925	2	'Explicit HARQ Memory Partitioning Clarification'	5.6.0	5.7.0
12/2003	22	RP-030674	927		Clarification of Timing advance applied for 1.28Mcps TDD	5.6.0	5.7.0
12/2003	22	RP-030684	931	1	Removal of the ambiguity about the activation time	5.6.0	5.7.0
12/2003	22	RP-030679	933		Ambiguity of the activation time of the Physical Shared CH Reconfiguration	5.6.0	5.7.0
12/2003	22	RP-030690	937	1	Correction to Addition of HS-DSCH MAC-d Flows	5.6.0	5.7.0
12/2003	22	RP-030679	938	1	Resource Status Indication and Audit for HSDPA	5.6.0	5.7.0
12/2003	22	RP-030695	939	1	Unsynchronised RL Reconfiguration for HSDPA	5.6.0	5.7.0
12/2003	22	RP-030694	940	2	TNL QoS for uplink IP traffic	5.6.0	5.7.0
12/2003	22	RP-030689	941	_	Correction of Transmission Gap Pattern Sequence Information	5.6.0	5.7.0
12/2003	22	RP-030679	945	2	NBAP Review	5.6.0	5.7.0
12/2003	22	RP-030679	946	1	Correction to Physical Shared Channel Reconfiguration for HSDPA	5.6.0	5.7.0
12/2003	22	RP-030679	947	1	Correction to Common Measurements for HSDPA	5.6.0	5.7.0
12/2003	22	RP-030683	949		Information Exchange Initiation behavior correction	5.6.0	5.7.0
12/2003	22 22	RP-030674	951	2	Extension of Requested Data Value IE	5.6.0 5.7.0	5.7.0
12/2003 03/2004	23	RP-030726 RP-040088	935 952		Signalling Support for Beamforming Enhancement Interference measurement in UpPTS for 1.28Mcps TDD	6.0.0	6.0.0
03/2004	23	RP-040088	954	1	Enabling of closed loop transmit diversity in TDD mode	6.0.0	6.1.0
03/2004	23	RP-040071	956	<del>'</del>	Correction of Reconfiguration of Multiple Radio Links in TDD	6.0.0	6.1.0
03/2004	23	RP-040065	960		Corrections for HS-DSCH Configuration Signalling	6.0.0	6.1.0
03/2004	23	RP-040066	962	1	Priority Queue ID for HSDPA	6.0.0	6.1.0
03/2004	23	RP-040071	968	1	Correction of the Dedicated Measurement Initiation procedure with	6.0.0	6.1.0
03/2004	23	RP-040058	972	1	'All NBCC' NBAP ASN.1 Corrections for the CELL SYNCHRONISATION	6.0.0	6.1.0
00/555	000	DD 015 == 1	0= :	<u> </u>	RECONFIGURATION REQUEST TDD message	0.0 -	
03/2004	23	RP-040071	974	-	NBAP Corrections for TDD	6.0.0	6.1.0
03/2004	23	RP-040068	978		Extension of the range of PCCPCH RSCP	6.0.0	6.1.0
03/2004	23	RP-040069	980		Introduce the description of AOA measurement in the Allowed	6.0.0	6.1.0
03/2004	23	RP-040067	983		Combinations of Dedicated Measurement  Correction Related to HS-DSCH Information Response	6.0.0	6.1.0

03/2004	23	RP-040071	985		Correction to HS-SCCH Code Range	6.0.0	6.1.0
03/2004	23	RP-040064	987		Setting of TGPSI	6.0.0	6.1.0
06/2004	24	RP-040176	991	1	Correction of PHYSICAL SHARED CHANNEL RECONFIGURATION message	6.1.0	6.2.0
06/2004	24	RP-040178	993		Node B usage of the MAC-hs re-ordering buffer size	6.1.0	6.2.0
06/2004	24	RP-040180	995	1	Unsuccessful Operation of RL Setup Procedure for HSDPA	6.1.0	6.2.0
06/2004	24	RP-040184	997	1	Measurement Recovery Behavior for Common and Dedicated Measurement Procedures	6.1.0	6.2.0
06/2004	24	RP-040179	999		Clarification on number of and capacity reporting of Priority Queues	6.1.0	6.2.0
06/2004	24	RP-040181	1009		Power Balancing Corrections	6.1.0	6.2.0
06/2004	24	RP-040235	1010		Addition of TSTD for S-CCPCH in 3.84 Mcps TDD	6.1.0	6.2.0
09/2004	25	RP-040301	1014		Use of Communication Context id in NBAP reset	6.2.0	6.3.0
09/2004	25	RP-040295	1019	2	Addition of TSTD for S-CCPCH, PICH and PDSCH in 1.28 Mcps TDD	6.2.0	6.3.0
09/2004	25	RP-040301	1021		Re-wording of the Intra-Node B Serving HS-DSCH Radio Link Change in the Prepared Radio Link Reconfiguration procedure	6.2.0	6.3.0
09/2004	25	RP-040302	1025		Correction to tabular text associated with TDD DPCH Offset IE	6.2.0	6.3.0
09/2004	25	RP-040295	1029		Review on NBAP	6.2.0	6.3.0
09/2004	25	RP-040324	1032		Clarification on the FPACH configuration for 1.28Mcps TDD	6.2.0	6.3.0
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
12/2004	26	RP-040435	1048	1	Correction to the Assigned Criticality of UL Synchronisation Parameters LCR IE for 1.28Mcps TDD	6.3.0	6.4.0
12/2004	26	RP-040437	1049	4	Introduction of MBMS	6.3.0	6.4.0
12/2004	26	RP-040441	1056		outdated ITU-T reference	6.3.0	6.4.0
12/2004	26	RP-040434	1058	3	Adaptive encoding of IB_SG_DATA	6.3.0	6.4.0
12/2004	26	RP-040440	1059	1	CR for Introduction of E-DCH in NBAP	6.3.0	6.4.0
12/2004	26	RP-040518	1061		HS-DPCCH ACK/NACK preamble and postamble	6.3.0	6.4.0
03/2005	27	RP-050059	1068		Measurement Recovery Behavior in Dedicated Measurement Procedures	6.4.0	6.5.0
03/2005	27	RP-050054	1070		Availability Status reference correction	6.4.0	6.5.0
03/2005	27	RP-050038	1074	1	Removal of TGPL2	6.4.0	6.5.0
03/2005	27	RP-050053	1076		Wrong HS IE referenced	6.4.0	6.5.0
03/2005	27	RP-050054	1078		Measurement Power Offset IE optionality at HS-DSCH setup	6.4.0	6.5.0
03/2005	27	RP-050050	1080	1	Introduction of 'DL Transmission Branch Load' measurement	6.4.0	6.5.0
03/2005	27	RP-050058	1081	2	E-DCH NBAP ASN.1	6.4.0	6.5.0
03/2005	27	RP-050056	1082	1	Introduction of Fractional DPCH	6.4.0	6.5.0
03/2005	27	RP-050059	1083		Initial Radio Link Timing Adjustment	6.4.0	6.5.0
03/2005	27	RP-050062	1085	2	HSDPA Code Allocation/Measurement per Cell Portion	6.4.0	6.5.0
03/2005	27	RP-050053	1087		Interaction between Synchronised RL Reconfiguration and RL Deletion	6.4.0	6.5.0
03/2005	27	RP-050053	1089		Clarification on HS-DSCH Information IE	6.4.0	6.5.0
06/2005	28	RP-050254	1088	3	Timing maintained hard HO	6.5.0	6.6.0
06/2005	28	RP-050236	1091		Addition of SIB5bis in IB Type	6.5.0	6.6.0
06/2005	28	RP-050233	1094		Proposed CR to 25.433 [Rel-6] on some IEs with SatID	6.5.0	6.6.0
06/2005	28	RP-050233	1095		Correction to the on demand measurement with no DPCH ID in the dedicated measurement procedure for TDD	6.5.0	6.6.0
06/2005	28	RP-050236	1096	3	Revision to HARQ Preamble Mode support	6.5.0	6.6.0
06/2005	28	RP-050225	1099	2	Feature Cleanup: Removal of CPCH	6.5.0	6.6.0
06/2005	28	RP-050229	1100	1	E-DCH general corrections and improvements	6.5.0	6.6.0
06/2005	28	RP-050229	1103	2	E-DCH Capacity Consumption Law	6.5.0	6.6.0
06/2005	28	RP-050229	1106	2	E-DCH diversity control	6.5.0	6.6.0
06/2005	28	RP-050229	1107	2	E-DCH: Provided bit-rate per logical channel priority measurement	6.5.0	6.6.0
06/2005	28	RP-050229	1108	1	E-DCH Maximum Received Total Wide Band Power	6.5.0	6.6.0
06/2005	28	RP-050224	1110	1	Feature clean-up: Removal of Compressed mode by puncturing	6.5.0	6.6.0
06/2005	28	RP-050221	1112	1	Feature clean-up: Removal of Tx diversity closed loop mode2	6.5.0	6.6.0
06/2005	28	RP-050222	1114	1	Feature clean-up: Removal of DSCH (FDD mode)	6.5.0	6.6.0
06/2005	28	RP-050218	1116	1	Feature Clean-up: Removal of 80 ms TTI for DCH for all other cases but when the UE supports SF512	6.5.0	6.6.0
06/2005	28	RP-050220	1118		Feature Clean-up: Removal of Support of dedicated pilot as sole phase reference	6.5.0	6.6.0
06/2005	28	RP-050219	1120	1	Feature Clean-up: Removal of SSDT	6.5.0	6.6.0
06/2005	28	RP-050229	1121	1	Correction on E-RGCH Sequence Signature	6.5.0	6.6.0
06/2005	28	RP-050230	1122	1	Introduction of Bundling Feature	6.5.0	6.6.0
06/2005	28	RP-050228	1124	1	Synchronisation for MBMS p-t-m Transmissions from Multiple Cells (Simulcast)	6.5.0	6.6.0
06/2005	28	RP-050229	1125	1	Alignment of NBAP with latest status of EUDCH stage 2 (TS 25.309) and RRC (TS 25.331)	6.5.0	6.6.0
		RP-050433	1126	2	NBAP stage 3 alignment with current status	6.6.0	6.7.0

09/2005	29	RP-050433	1127		E-DCH Minimum Set Reference Correction	6.6.0	6.7.0
09/2005	29	RP-050444	1128	1	Improvement of the Abnormal Conditions description of the	6.6.0	6.7.0
					COMMON MEASUREMENT INITIATION procedure		
09/2005	29	RP-050435	1130	1	Signalling of Reference Received Total Wideband Power IE	6.6.0	6.7.0
09/2005	29	RP-050435	1132		Transport Bearer Rearrangement for HSUPA	6.6.0	6.7.0
09/2005	29 29	RP-050437 RP-050440	1135	2	Correction for Beamforming	6.6.0	6.7.0
09/2005 09/2005	29	RP-050440	1136 1140	2	Non HS transmitted power  E-DCH miscellaneous corrections	6.6.0	6.7.0
09/2005	29	RP-050434	1141		Maximum UE TX Power for E-DCH	6.6.0	6.7.0
09/2005	29	RP-050434	1142		Addition of MBMS Notification function description	6.6.0	6.7.0
09/2005	29	RP-050444	1143	1	Proposed CR to 25.433 [Rel-6] on Correction for the measurement	6.6.0	6.7.0
					report for PUSCH for TDD		
09/2005	29	RP-050444	1144	2	Proposed CR to 25.433 [Rel-6] on Correction for DPCH Modification in asynthronised RL reconfiguration procedure for LCR TDD	6.6.0	6.7.0
09/2005	29	RP-050433	1145	2	Serving to Non-serving power ratio	6.6.0	6.7.0
09/2005	29	RP-050433	1146		EDCH cleanup	6.6.0	6.7.0
09/2005	29 29	RP-050433	1147	4	Reconfiguration of E-RGCH/HICH at serving cell change	6.6.0	6.7.0
09/2005 12/2005	30	RP-050440 RP-050700	1148 1151	1	Maximum Transmission Power and Total HS Power for Cell Portion Compressed Mode Reconfiguration	6.6.0 6.7.0	6.7.0
12/2005	30	RP-050699	1155	3	NBAP clean-up	6.7.0	6.8.0
12/2005	30	RP-050695	1156	2	EDCH Cell Capability Enhancement	6.7.0	6.8.0
12/2005	30	RP-050695	1157	_	FDD Downlink Unidirectional DCH Indicator	6.7.0	6.8.0
12/2005	30	RP-050695	1158	3	FDD Unidirectional DCH Indicator reconfiguration	6.7.0	6.8.0
12/2005	30	RP-050694	1160	4	HARQ Process Management for E-DCH	6.7.0	6.8.0
12/2005	30	RP-050694	1161	2	E-DCH processing issue and rate limitation	6.7.0	6.8.0
12/2005	30	RP-050696	1162	3	HSPA Serving Cell Change by RL Addition Procedure	6.7.0	6.8.0
12/2005	30	RP-050694	1165	3	Alignment of NBAP with latest HSUPA agreements	6.7.0	6.8.0
12/2005	30	RP-050699	1166	1	Abnormal Condition for Maximum Target Received Total Wideband Power	6.7.0	6.8.0
12/2005	30	RP-050699	1167		HSUPA DL Channel Code Allocation per Cell Portion	6.7.0	6.8.0
12/2005	30	RP-050696	1168	2	Correction for HARQ Preamble and Postamble	6.7.0	6.8.0
12/2005	30	RP-050700	1169		Alignment of Tables in the Common Measurement Description	6.7.0	6.8.0
12/2005	30	RP-050699	1173	1	Update of EDCH Capacity consumption law	6.7.0	6.8.0
12/2005	30	RP-050694	1174	1	EDCH setup by unsynchronised reconfiguration	6.7.0	6.8.0
12/2005	30	RP-050696	1175		FDPCH and HS-SCCH power offset	6.7.0	6.8.0
12/2005	30	RP-050849	1179	1	E-DCH HARQ RV Configuration	6.7.0	6.8.0
03/2006	31	RP-060064 RP-060067	1178	2	E-DCH HARQ Combining Capability	6.8.0	6.9.0
03/2006		RP-060067	1182 1186	1	F-DPCH Cell Capability Enhancement	6.8.0	6.9.0
03/2006	31	RP-060067	1188	3	Correction of Notification Indicator Adding HS-DSCH TDD Info in Radio Link Addition procedure	6.8.0	6.9.0
03/2006	31	RP-060063	1189	1	Combined Active Set Update and E-DCH Serving Cell Change with	6.8.0	6.9.0
03/2000			1103	'	Radio Link Addition Request (Inter Node B Case)	0.0.0	
03/2006	31	RP-060067	1190		NBAP Review before Freezing	6.8.0	6.9.0
03/2006	31	RP-060064	1191	1	E-DCH Mac-D PDU Size List Alignment	6.8.0	6.9.0
03/2006	31	RP-060064	1192	2	Non serving HSDPA indicator for E-DCH	6.8.0	6.9.0
03/2006	31	RP-060064	1193		Clarification on serving EDCH cell change	6.8.0	6.9.0
03/2006	31	RP-060068	1196		Error Correction ASN.1 Radio Link Parameter Update	6.8.0	6.9.0
03/2006	31	RP-060063	1197		CR cross-dependencies for HS cell change by RL ADDITION	6.8.0	6.9.0
03/2006	31	RP-060064	1199	-	Alignment of E-DCH RL Set ID	6.8.0	6.9.0
03/2006	31	RP-060063	1200	1	Compressed Mode Correction	6.8.0	6.9.0
03/2006 03/2006	31 31	RP-060060 RP-060063	1203 1204	1	Addition of the SIR Target for HS-SICH in 1.28Mcps TDD  Correction to the on demand mesurement for the HS-SICH in the	6.8.0	6.9.0
03/2006	31	RP-060064	1205		dedicated measurement procedure for TDD  Correction of criticality for Unirectional DCH Indictor	6.8.0	6.9.0
03/2006	31	RP-060064	1205	1	HARQ Failure Indication due to MAC-e Reset in UE	6.8.0	6.9.0
03/2006	31	RP-060068	1208	<u> </u>	General Corrections and Improvements for E-DCH	6.8.0	6.9.0
03/2006	31	RP-060067	1208	1	Correction on HSPA Serving Cell Change using RL Addition procedure	6.8.0	6.9.0
03/2006	31	RP-060084	1211	1	Non-serving E-DCH Load Excess Indication	6.8.0	6.9.0
03/2006	31	RP-060064	1211	2	Introduction of E-DCH Reference Power Offset	6.8.0	6.9.0
03/2006	31	RP-060069	1213	_	Clarification on SCCH TPC step size for LCR TDD	6.8.0	6.9.0
03/2006	31	RP-060070	1184	1	Introduction of the PLCCH	6.9.0	7.0.0
03/2006	31	RP-060073	1185	1	Introduction of 7.68Mcps TDD option	6.9.0	7.0.0
06/2006	32	RP-060285	1215	2	Correction to the Time Slot Format Configuration of PUSCH/PDSCH for LCR TDD	7.0.0	7.1.0
06/2006	32	RP-060279	1217	2	CR to 25.433[Rel-7] on correction for DL DPCH Power Information	7.0.0	7.1.0
06/2006	32	RP-060280	1226	1	CR cross-dependencies for E-DCH Reference Power Offset by RL ADDITION	7.0.0	7.1.0
06/2006	32	RP-060280	1230	2	Corrections to E-DCH Uplink Combination in RL SETUP and RL ADDITION	7.0.0	7.1.0
							7.1.0

06/2006	32	DD 060391	1236		RGCH E-RGCH/E-HICH Power Offset value range	700	710
06/2006 06/2006	32	RP-060281 RP-060279	1238		Corrections to Combined RL Addition with HS-DSCH /E-DCH	7.0.0	7.1.0
00/2000	32		1230		Serving change	7.0.0	1,
06/2006	32	RP-060290	1239	2	Release 7 Timing Advance (3.84 Mpcs and 7.68 Mcps TDD)	7.0.0	7.1.0
06/2006	32	RP-060291	1240		Addition of HS-DSCH information in radio link addition procedure for 7.68 Mcps TDD	7.0.0	7.1.0
06/2006	32	RP-060280	1242	2	E-DCH and HS-DSCH same serving cell	7.0.0	7.1.0
06/2006	32	RP-060280	1244	1	HS-DSCH Configured Indicator for Radio Link Addition	7.0.0	7.1.0
06/2006	32	RP-060281	1246	1	E-RNTI allocation on serving change	7.0.0	7.1.0
06/2006	32	RP-060276	1250		Aspect of CPCH not removed for power offset	7.0.0	7.1.0
06/2006	32	RP-060407	1252	2	Introduction of TNL QoS IE for shared channels	7.0.0	7.1.0
06/2006	32	RP-060289	1253	1	Change semantic description in tabular format of UARFCN IE	7.0.0	7.1.0
06/2006	32	RP-060431	1256	2	Power Offset for E-DCH control-only transmissions	7.0.0	7.1.0
06/2006	32	RP-060281	1258	1	Abnormal condition for HS-DSCH Configured Indicator IE	7.0.0	7.1.0
09/2006	33	RP-060495	1260	2	Introduction of a Node B measurement for E-DCH RRM	7.1.0	7.2.0
09/2006	33	RP-060506	1262	3	Modifying HS-DSCH Physical Layer Category Info in Radio Link Reconfiguration procedure	7.1.0	7.2.0
09/2006	33	RP-060506	1270	2	Addition of the TPC step size for HS-SICH in 1.28Mcps TDD	7.1.0	7.2.0
09/2006	33	RP-060501	1275	1	Correction on the value range of E-DCH IEs	7.1.0	7.2.0
09/2006	33	RP-060505	1277	2	Corrections on physical shared channel reconfiguration	7.1.0	7.2.0
09/2006	33	RP-060501	1279	1	E-AGCH and E-RGCH/E-HICH FDD scrambling code in response messages	7.1.0	7.2.0
09/2006	33	RP-060500	1281	1	DCH combined when EDCH operation	7.1.0	7.2.0
09/2006	33	RP-060505	1283		Alignment of the RL Specific E-DCH Information IE tabular format to ASN.1	7.1.0	7.2.0
09/2006	33	RP-060500	1287		Optional usage of the E-DCH Reference Power Offset IE	7.1.0	7.2.0
09/2006	33	RP-060506	1289	1	Clarification on Communication Context ID usage for the Reset Request	7.1.0	7.2.0
09/2006	33	RP-060498	1292		TFCI2 bearer Cleanup for Radio link Deletion	7.1.0	7.2.0
09/2006	33	RP-060511	1294	1	Introduction of 3.84 Mcps and 7.68Mcps TDD Enhanced Uplink	7.1.0	7.2.0
09/2006	33	RP-060506	1296	2	Per time slot configuration of TFCI for TDD FACH type CCTrCHs	7.1.0	7.2.0
09/2006	33	RP-060509	1299	2	Extended WCDMA Cell Range	7.1.0	7.2.0
09/2006	33	RP-060514	1300	1	Addition of missing ASN.1 from CR1252	7.1.0	7.2.0
09/2006	33	RP-060500	1305		Further Abnormal Conditions for E-DCH	7.1.0	7.2.0
09/2006	33	RP-060505	1307		General Description for E-DCH in RL Setup procedure	7.1.0	7.2.0
09/2006	33	RP-060596	1308	2	Introduction of a noise floor indication from Node B for E-DCH RRM		7.2.0
09/2006	33	RP-060502	1310		Introduction of new indicator for non DCH operation	7.1.0	7.2.0
09/2006 09/2006	33 33	RP-060479 RP-060570	1311 1313		Correction to coding of PLCCH for 1.28Mcps TDD Introduction of SIB11bis	7.1.0 7.1.0	7.2.0
12/2006	34	RP-060700	1317	1	Correction for the max reptition of RL Information Response IE in tabular	7.2.0	7.3.0
12/2006	34	RP-060700	1323		Correction to an abnormal case in E-DCH RL ADDITION	7.2.0	7.3.0
12/2006	34	RP-060703	1326	1	MAC-hs Reset Indicator	7.2.0	7.3.0
12/2006	34	RP-060709	1327	2	Fast Reconfiguration	7.2.0	7.3.0
12/2006	34	RP-060705	1328	2	Correction of Round Trip Time for Extended Cell Range	7.2.0	7.3.0
12/2006	34	RP-060707	1331	1	RL Setup Procedure Combined with HSPA Serving Cell Change	7.2.0	7.3.0
03/2007	35	RP-070065	1329	5	lub transport efficiency improvement for MBMS	7.3.0	7.4.0
03/2007	35	RP-070057	1330	2	Introduction of Continuous Packet Connectivity in NBAP	7.3.0	7.4.0
03/2007	35	RP-070057	1334	1	HS-PDSCH code change for CPC mode	7.3.0	7.4.0
03/2007	35	RP-070053	1337	1	Abnormal conditions for IP Transport Option and Diversity Control field	7.3.0	7.4.0
03/2007	35	RP-070056	1339	1	Correction of the Maximum number of logical channel ID	7.3.0	7.4.0
03/2007	35	RP-070061	1342	1	Introduction of MIMO in NBAP	7.3.0	7.4.0
03/2007	35	RP-070129	1344	2	Introduction of 1.28 Mcps TDD Enhanced Uplink	7.3.0	7.4.0
03/2007	35	RP-070067	1346	1	Introduction of Downlink Higher Order Modulation in NBAP	7.3.0	7.4.0
03/2007	35	RP-070063	1351	2	Presence of Guaranteed Bit Rate	7.3.0	7.4.0
06/2007	36	RP-070332	1341	3	Support of higher bitrates and Flexible RLC PDU size on HS-DSCH	7.4.0	7.5.0
06/2007	36	RP-070331	1347	4	Introduction of Uplink Higher Order Modulation in NBAP	7.4.0	7.5.0
	36	RP-070328	1348	5	Introduction of Enhanced Cell_FACH state feature	7.4.0	7.5.0
06/2007	36	RP-070338	1352	1	Support of F-DPCH Enhancement	7.4.0	7.5.0
06/2007		RP-070335	1353	1	Introduction of MBMS SFN (TDD)	7.4.0	7.5.0
06/2007 06/2007	36		46-	2	Introduction of MBMS SFN (FDD)	7.4.0	7.5.0
06/2007 06/2007 06/2007	36	RP-070333	1354			<b>-</b> , .	
06/2007 06/2007 06/2007 06/2007	36 36	RP-070333 RP-070322	1357	2	The introduction of MBMS capability indicator	7.4.0	7.5.0
06/2007 06/2007 06/2007 06/2007 06/2007	36 36 36	RP-070333 RP-070322 RP-070320	1357 1359	2	The introduction of MBMS capability indicator  Correction of wrong description for E-DCH HARQ process allocation for 2ms TT	7.4.0	7.5.0
06/2007 06/2007 06/2007 06/2007 06/2007	36 36 36 36	RP-070333 RP-070322 RP-070320 RP-070339	1357 1359 1362	2	The introduction of MBMS capability indicator  Correction of wrong description for E-DCH HARQ process allocation for 2ms TT  Abnormal condition for Unidirection DCH Indicator	7.4.0 7.4.0	7.5.0 7.5.0
06/2007 06/2007 06/2007 06/2007 06/2007 06/2007	36 36 36 36 36	RP-070333 RP-070322 RP-070320 RP-070339 RP-070320	1357 1359 1362 1364	2	The introduction of MBMS capability indicator  Correction of wrong description for E-DCH HARQ process allocation for 2ms TT  Abnormal condition for Unidirection DCH Indicator  Modification on the range of Measurement Value for HS-SICH reception quality in LCR TDD	7.4.0 7.4.0 7.4.0	7.5.0 7.5.0 7.5.0
06/2007 06/2007 06/2007 06/2007 06/2007	36 36 36 36	RP-070333 RP-070322 RP-070320 RP-070339	1357 1359 1362	2	The introduction of MBMS capability indicator  Correction of wrong description for E-DCH HARQ process allocation for 2ms TT  Abnormal condition for Unidirection DCH Indicator  Modification on the range of Measurement Value for HS-SICH	7.4.0 7.4.0	7.5.0 7.5.0

06/2007	36	RP-070326	1371		Alignment of UE DTX long preamble IE in RNSAP/NBAP with RRC		7.5.0
06/2007	36	RP-070327	1372	ļ.,	Introduction of missing cause values for MIMO	7.4.0	7.5.0
06/2007 06/2007	36 36	RP-070326 RP-070394	1373 1375	1	Introduction of missing cause values for CPC Correction to definition of Power Resource Related Information	7.4.0 7.4.0	7.5.0 7.5.0
					(TDD only)		
06/2007	36	RP-070339	1378	2	Alignment of LCR TDD IEs tabular description with ASN.1 definition	7.4.0	7.5.0
06/2007	36	RP-070337	1379	2	Introduction of GANSS (Galileo and Additional Navigation Systems) in NBAP		7.5.0
06/2007	36	RP-070340	1380	1	Max UE DTX Cycle Signaling Support for CPC operation	7.4.0	7.5.0
06/2007	36	RP-070324	1382	ļ.,	Some minor corrections for 1.28 Mcps TDD E-DCH	7.4.0	7.5.0
06/2007	36	RP-070324	1383	1	Modification on the non-scheduled transmission and the UL interference control for 1.28 Mcps TDD E-DCH	7.4.0	7.5.0
06/2007	36	RP-070474	1386	2	Introduction of Extended RNC-ID	7.4.0	7.5.0
09/2007	37	RP-070565	1388	2	Clarification of the MBMS Notification update procedure	7.5.0	7.6.0
09/2007	37	RP-070566	1390	2	Correction of Power offset for E-HICH, E-AGCH, E-RGCH and HS-SCCH when F-DPCH is configured	7.5.0	7.6.0
09/2007	37	RP-070565	1392	1	PO2 for F-DPCH	7.5.0	7.6.0
09/2007	37	RP-070569	1393		TDD E-DCH Non-scheduled resource deletion	7.5.0	7.6.0
09/2007	37	RP-070571	1394		Extension of the ranges of the MAC-hs / MAC-es Guaranteed Bit Rate IEs	7.5.0	7.6.0
09/2007	37	RP-070572	1395	1	Extension of the range of the "Reference E-TFCI Power Offset" for UL 16QAM	7.5.0	7.6.0
09/2007	37	RP-070572	1396	1	Extension of the ranges of the "Maximum Number of Bits per MAC- e PDU for Non-scheduled transmission" and "E-DCH Maximum Bitrate" for UL 16QAM	7.5.0	7.6.0
09/2007	37	RP-070630	1397	2	HARQ Memory Partitioning for MIMO	7.5.0	7.6.0
09/2007	37	RP-070580	1399	1	Transport bearer sharing for FACHs	7.5.0	7.6.0
09/2007	37	RP-070580	1400		Binding ID and Transport Layer Address IEs in CTrCH SETUP RESPONSE	7.5.0	7.6.0
09/2007	37	RP-070580	1401		ToA window reconfiguration in case of transport bearer shared by several FACHs	7.5.0	7.6.0
09/2007	37	RP-070580	1402	1	Use of RSI (service impacting) for change of capabilities reported in conditional IEs	7.5.0	7.6.0
09/2007	37	RP-070574	1403		MBSFN Only Mode Capability IE in AUDIT RESPONSE message	7.5.0	7.6.0
09/2007	37	RP-070567	1404		TUTRAN-GPS Accuracy Class IE not applicable to GANSS	7.5.0	7.6.0
09/2007	37	RP-070580	1407	2	A small change on the configuration of MBSFN Cell Parameter ID for 1.28 Mcps TDD	7.5.0	7.6.0
09/2007	37	RP-070650	1408	3	Introduction of multi-frequency for 1.28Mcps TDD in 25.433	7.5.0	7.6.0
09/2007	37	RP-070571	1410	1	N/M ratio for MIMO decided by the Node B	7.5.0	7.6.0
09/2007	37	RP-070573	1411		Corrections related to changes for Improved L2 and Enhanced FACH	7.5.0	7.6.0
09/2007	37	RP-070580	1412		Removal of reference to SIB 8,9,10	7.5.0	7.6.0
09/2007	37	RP-070580	1413	3	NBAP clean up	7.5.0	7.6.0
09/2007	37	RP-070574	1414		Adding unit to modulation power offset for MBSFN	7.5.0	7.6.0
09/2007	37	RP-070573	1416	2	Corrections/Small Improvements for Enhanced Cell_FACH	7.5.0	7.6.0
09/2007	37	RP-070575	1417		Corrections/Small Improvements for CPC	7.5.0	7.6.0
09/2007	37	RP-070581	1420	1	Enhancements to Macro Diversity & Cell Interference Control	7.5.0	7.6.0
12/2007	38	RP-070846	1409	3	The Improvement of lub Efficiency for MBMS in IP RAN	7.6.0	7.7.0
12/2007	38	RP-070841	1422	2	ASN1-Tabular alignment for GANSS feature in TS25.433	7.6.0	7.7.0
12/2007	38	RP-070838	1423		Correction of CPC parameters	7.6.0	7.7.0
12/2007	38	RP-070911	1424		E-TFCI BetaEC Boost and E-TFCI BetaED Switch IEs updates	7.6.0	7.7.0
12/2007	38	RP-071017	1425	2	HARQ Memory Partitioning Information Extension For MIMO IE criticality	7.6.0	7.7.0
12/2007	38	RP-070938	1426		Scheduled Grant setting in DTX Cycle 2 during CPC operation	7.6.0	7.7.0
12/2007	38	RP-070842	1427	_	ASN.1 cleanup	7.6.0	7.7.0
12/2007	38	RP-070842	1428	1	Update of the tabular description	7.6.0	7.7.0
12/2007	38	RP-070844	1431		ASN.1 Modification for 1.28Mcps TDD	7.6.0	7.7.0
12/2007	38	RP-070840	1432	2	Further corrections on Enhanced Cell_FACH	7.6.0	7.7.0
12/2007	38	RP-070844	1434	2	More improvement on dedicated frequency for 1.28 Mcps TDD MBMS	7.6.0	7.7.0
12/2007	38	RP-070844	1435		Corrections and clarifications of RoT threshold for LCR TDD E- DCH	7.6.0	7.7.0
12/2007	38	RP-070844	1436	<u> </u>	HS-SCCH Channelisation Code for Cell_PCH UE	7.6.0	7.7.0
12/2007	38	RP-070839	1437	2	64 QAM Activation	7.6.0	7.7.0
12/2007	38	RP-070838	1438		Correction for PRXdes_base in LCR TDD EUL	7.6.0	7.7.0
12/2007	38	RP-070843	1439	_	Correction for E-DCH Combing in RL Reconfiguration	7.6.0	7.7.0
12/2007	38	RP-071041	1440	3	Abnormal condition for UL DPCCH slot format 4	7.6.0	7.7.0
12/2007	38	RP-070843	1441	1	Correction of the location of Delta T2TP parameter	7.6.0	7.7.0
	39	RP-080072	1442	1	Correction on MAC-d PDU Size for E-DCH	7.7.0	7.8.0
03/2008 03/2008	39	RP-080073	1443	1	Correction on Abnormal Condition for identical cell on HSDPA/E-	7.7.0	

					Information to Modify		
03/2008	39	RP-080072	1445		Abnormal Condition on DL L2 Improvement	7.7.0	7.8.0
03/2008	39	RP-080072	1446		E-DCH RL Set ID IE handling	7.7.0	7.8.0
03/2008	39	RP-080074	1447		Transport bearer replacement during HS-DSCH Modification	7.7.0	7.8.0
03/2008	39	RP-080073	1448		UL DPCCH Slot Format 5 undefined	7.7.0	7.8.0
03/2008	39	RP-080073	1450	3	Addition of IE "Continuous Packet Connectivity HS-SCCH less Deactive Indicator"	7.7.0	7.8.0
03/2008	39	RP-080076	1451	1	Supporting multi-frequency operation on MBMS for 1.28Mcps TDD	7.7.0	7.8.0
03/2008	39	RP-080076	1452		Clarification of E-DCH non-scheduled Grant Information for	7.7.0	7.8.0
03/2008	39	RP-080076	1453	1	1.28Mcps TDD Introduction of an additional UE Category for 1.28Mcps TDD E-	7.7.0	7.8.0
03/2008	39	RP-080076	1454	1	DCH Introduction of multi-frequency operation for HSUPA for 1.28Mcps	7.7.0	7.8.0
03/2008	39	RP-080072	1455		TDD Event C and D for Received Scheduled E-DCH Power Share for	7.7.0	7.8.0
03/2008	39	RP-080151	1462	2	Cell Portion  Correction the condition of UL DPDCH Indicator for E-DCH	7.7.0	7.8.0
					Operation		
03/2008	39	RP-080083	1457	1	Introduction of Improved L2 for Uplink	7.8.0	8.0.0
03/2008	39	RP-080084	1460	2	Inclusion of Cell Id into common measurement report	7.8.0	8.0.0
06/2008	40	RP-080307	1464		Introduction of LCR TDD 64QAM in NBAP	8.0.0	8.1.0
06/2008	40	RP-080404	1466	2	Mechanism for Scheduling Information transmission on MAC-e PDU alone for 1.28 Mcps TDD in EUL	8.0.0	8.1.0
06/2008	40	RP-080295	1470	1	Modification of E-HICH Time Offset configuration for LCR TDD	8.0.0	8.1.0
06/2008	40	RP-080295	1476	1	Extended power control gap for E-PUCH in LCR TDD	8.0.0	8.1.0
06/2008	40	RP-080296	1478	1	Support of octet aligned HS-DSCH transport block sizes for non-64QAM	8.0.0	8.1.0
06/2008	40	RP-080298	1480		Power Control Gap IE handling	8.0.0	8.1.0
06/2008	40	RP-080299	1483	2	RL Parameter Update for E-DCH FDD DL Control Channel Information	8.0.0	8.1.0
06/2008	40	RP-080298	1485	1	Clarification on Transport Bearer Not Requested Indicator	8.0.0	8.1.0
06/2008	40	RP-080298	1489		ASN.1 and tabular misalignment	8.0.0	8.1.0
06/2008	40	RP-080294	1497	1	Use of UL DPDCH Indicator For E-DCH Operation IE for unsynchronised RL reconfiguration	8.0.0	8.1.0
06/2008	40	RP-080300	1499	1	GANSS Corrections	8.0.0	8.1.0
06/2008	40	RP-080308	1500		introduction of feature indicator	8.0.0	8.1.0
09/2008	41	RP-080576	1504		Extension of the ranges of the HS-DSCH / E-DCH Provided Bit	8.1.0	8.2.0
09/2008	41	RP-080576	1506	1	Rate Value IES  COMMON TRANSPORT CHANNEL SETUP REQUEST TDD	8.1.0	8.2.0
				·	message ASN correction		
09/2008	41	RP-080580	1508	1	Correct ASN.1 compatibility problem in PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message for 1.28Mcps TDD	8.1.0	8.2.0
09/2008	41	RP-080576	1512	2	Addition of 16QAM AG table choice IE	8.1.0	8.2.0
09/2008	41	RP-080576	1514	2	Adding abnormal conditions to Continuous Packet Connectivity	8.1.0	8.2.0
09/2008	41	RP-080577	1523		DRX-DTX and F-DPCH	8.1.0	8.2.0
09/2008	41	RP-080578	1528		Description of Priority Queue ID for Enhanced Cell_FACH	8.1.0	8.2.0
09/2008	41	RP-080578	1530	1	Removing the ambiguity in HS-DSCH Common System Information description	8.1.0	8.2.0
09/2008	41	RP-080580	1532		Some minor description corrections for E-DCH in LCR TDD	8.1.0	8.2.0
09/2008	41	RP-080579	1536		Correction of SixtyfourQAM-DL-UsageIndicator	8.1.0	8.2.0
09/2008	41	RP-080580	1534	2	Add Additional Time Slot LCR IE in common measuement messages	8.1.0	8.2.0
09/2008	41	RP-080587	1539	2	Introduction of Enhanced Uplink in Cell_FACH	8.1.0	8.2.0
09/2008	41	RP-080588	1540	1	Introduction of Enhanced UE DRX	8.1.0	8.2.0
09/2008	41	RP-080576	1542		Correction on Enhanced Cell_FACH/Cell_PCH	8.1.0	8.2.0
12/2008	42	RP-080848	1544		Inter-RAT Mobility to/from E-UTRAN	8.2.0	8.3.0
12/2008	42	RP-080858	1545	3	New NBAP Measurement on Common E-DCH Resource Usage	8.2.0	8.3.0
12/2008	42	RP-080852	1547	1	Support for additional navigation satellite systems in NBAP	8.2.0	8.3.0
12/2008	42	RP-080838	1553	1	Indication of E-DPCCH Power Boosting capability	8.2.0	8.3.0
12/2008	42	RP-080842	1555	1	Indication of Combination of 64QAM and MIMO	8.2.0	8.3.0
12/2008	42	RP-080858	1557		Some corrections for common E-DCH	8.2.0	8.3.0
12/2008	42	RP-080858	1558	0	Adding Common E-DCH implicit release indicator IE into NBAP message	8.2.0	8.3.0
12/2008	42	RP-080850	1561	2	Introduction of the Enhanced CELL_FACH, CELL_PCH, URA_PCH state for 1.28Mcps TDD		8.3.0
12/2008	42	RP-080838	1563	1	Correction of power control gap for 1.28Mcps TDD	8.2.0	8.3.0
12/2008	42	RP-080858	1564	1	E-RNTI in RL Setup Request	8.2.0	8.3.0
12/2008	42	RP-080838	1567		Correction on Usage for Transport Bearer Not Requested Indicator	8.2.0	8.3.0
12/2008	42	RP-080851	1568	2	Introduction of HS-DSCH Serving Cell Change Enhancements	8.2.0	8.3.0
12/2008	42	RP-080853	1569	1	Introduction of Dual Carrier	8.2.0	8.3.0
12/2008	42	RP-080855	1570	1	Improved EUL power control at UE power limitation	8.2.0	8.3.0
12/2008	42	RP-081120	1571	1	Support of IMB	8.2.0	8.3.0

## History

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