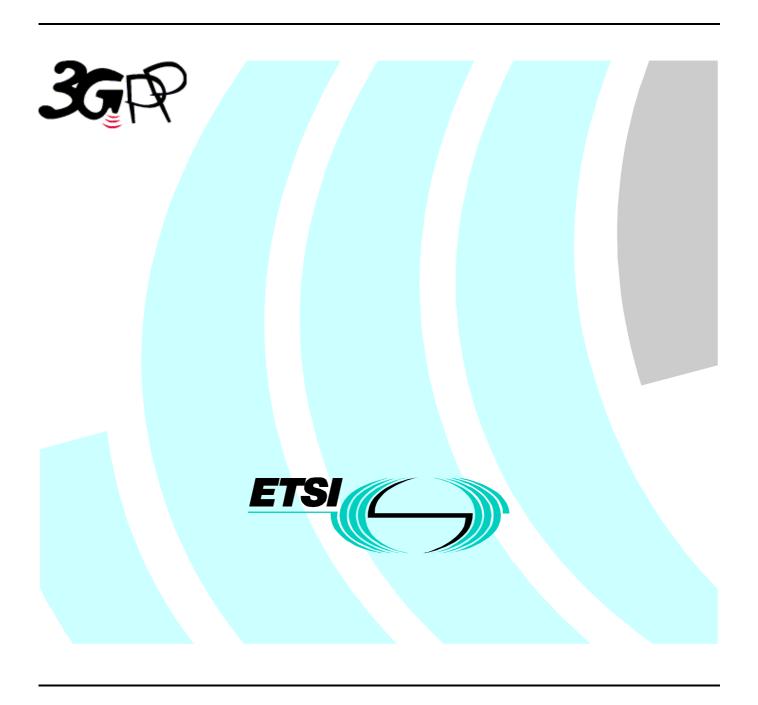
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Foreword

This Technical Specification has been produced by the 3GPP.

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

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

1 Scope

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

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.
- [1] 3GPP TS 25.401: "UTRAN Overall Description". [2] 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Signalling for DCH Data Streams". [3] CCITT Recommendation X.731 (01/92): "Information Technology – Open Systems Interconnection – Systems Management: State Management function". [4] 3GPP TS 25.215: "Physical layer – Measurements (FDD)". 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] [9] 3GPP TS 25.213: "Spreading and modulation (FDD)". [10] 3GPP TS 25.214: "Physical layer procedures (FDD)". ITU-T Recommendation X.691, (12/97) "Information technology - ASN.1 encoding rules -[11] Specification of Packed Encoding Rules (PER)".
- [12] ITU-T Recommendation X.680, (12/97) "Information Technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- ITU-T Recommendation X.681, (12/97) "Information Technology Abstract Syntax Notation One [13] (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 (V3.3): "Requirements for support of Radio Resource management (FDD)".
[23]	3GPP TS 25.123 (V4.0): "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)".

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 any more after

either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed.

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

AP-AICH Access Preamble Acquisition Indicator Channel

ASN.1 Abstract Syntax Notation One BCCH Broadcast Control Channel CCPCH Common Control Physical Channel

CFN Connection Frame Number

CM Compressed Mode

CPCH Common Packet Channel
CPICH Common Pilot Channel

CRNC Controlling Radio Network Controller CSICH CPCH Status Indicator Channel

DCH Dedicated Channel
DGPS Differential GPS
DL Downlink

DPCCH Dedicated Physical Control Channel

DPCH Dedicated Physical Channel
DPDCH Dedicated Physical Data Channel
DSCH Downlink Shared Channel
FACH Forward Access Channel
FDD Frequency Division Duplex

FP Frame Protocol

GPS Global Positioning System
IPDL Idle Periods in the DownLink
ISCP Interference Signal Code Power

L1 Layer 1 L2 Layer 2

MIB Master Information Block NBAP Node B Application Part O&M Operation and Maintenance

PCCPCH Primary Common Control Physical Channel

PCH Paging Channel

PCPCH Physical Common Packet Channel
PDSCH Physical Downlink Shared Channel
PUSCH Physical Uplink Shared Channel

RACH Random Access Channel

RL Radio Link RLS Radio Link Set

RNC Radio Network Controller RRC Radio Resource Control SB Scheduling Block

SCCPCH Secondary Common Control Physical Channel

SCH Synchronisation Channel SIB System Information Block

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

TDD Time Division Duplex

TFC Transport Format Combination

TFCI Transport Format Combination Indicator
TFCS Transport Format Combination Set

TFS Transport Format Set TPC Transmit Power Control

TSTD Time Switched Transmit Diversity

UARFCN UTRA Absolute Radio Frequency Channel Number

UE User Equipment

UL Uplink

UMTS Universal Mobile Telecommunications System

USCH Uplink Shared Channel

UTRA Universal Terrestrial Radio Access

UTRAN Universal Terrestrial Radio Access Network

4 General

4.1 Procedure Specification Principles

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

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

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

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

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

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

Any required inclusion of an optional IE in a response message is explicitly indicated in the procedure text. If the
procedure text does not explicitly indicate that an optional IE shall be included in a response message, the
optional IE shall not be included.

4.2 Forwards and Backwards Compatibility

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

4.3 Specification Notations

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

[FDD] This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.

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

 Multiple sequential paragraphs applying only to FDD are enclosed separately to enable insertion of TDD specific (or common) paragraphs between the FDD specific paragraphs.
- [TDD ...] This tagging indicates that the enclosed text following the "[TDD " applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. Multiple sequential paragraphs applying only to TDD are enclosed separately to enable insertion of FDD specific (or common) paragraphs between the TDD specific paragraphs.
- [3.84Mcps TDD ...] This tagging indicates that the enclosed text following the "[3.84Mcps TDD " applies only to 3.84Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 3.84Mcps TDD specific paragraphs.
- [1.28Mcps TDD ...] This tagging indicates that the enclosed text following the "[1.28Mcps TDD " applies only to 1.28Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 1.28Mcps TDD specific paragraphs.
- Procedure When referring to an elementary procedure in the specification the Procedure Name is written with the first letters in each word in upper case characters followed by the word "procedure", e.g. Radio Link Setup procedure.
- 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)" or "SSDT Active in the UE".

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 Node B to initiate measurements 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 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 [TDD]. This function allows the CRNC to manage physical resources in the Node B belonging to Shared Channels (USCH/DSCH).
- DL Power Timeslot Correction [TDD]. This function enables the Node B to apply an individual offset to the transmission power in each timeslot according to the downlink interference level at the UE.
- Cell Synchronisation [TDD]. This function allows the synchronisation of cells or Node Bs via the air interface.
- Information Exchange. This function allows the CRNC to initiate information provision from the Node B. The function also allows the Node B to report the requested information.

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

Table 1: Mapping between functions and NBAP elementary procedures

Function	Elementary Procedure(s)
Cell Configuration Management	a) Cell Setup
	b) Cell Reconfiguration
	c) Cell Deletion
Common Transport Channel Management	a) Common Transport Channel Setup
	b) Common Transport Channel Reconfiguration
	c) Common Transport Channel Deletion
System Information Management	System Information Update
Resource Event Management	a) Block Resource
	b) Unblock Resource
	c) Resource Status Indication
Configuration Alignment	a) Audit Required
	b) Audit
Measurements on Common Resources	c) Reset
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
Radio Link Supervision.	a) Radio Link Failure
Communication Made Control (EDD)	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
	Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation
	b) Dedicated Measurement Reporting
	c) Dedicated Measurement Termination
DI D. 1976	d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations Physical Shared Channel Management [TDD]	Error Indication Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Cell Synchronisation [TDD]	a) Cell Synchronisation Initiation
	b) Cell Synchronisation Reconfiguration
	c) Cell Synchronisation Reporting
	d) Cell Synchronisation Termination
	e) Cell Synchronisation Failure
Information Funkcias	f) Cell Synchronisation Adjustment
Information Exchange	a) Information Exchange Initiation
	b) Information Reporting c) Information Exchange Termination
	d) Information Exchange Failure
	a,simalisti Exchange i aliate

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 UE 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 UE context in Node B. This UE context is identified by a UE 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	CELL RECONFIGURATION
Recomiguration	NEQUEUT	RESPONSE	FAILURE
Cell Deletion	CELL DELETION REQUEST	CELL DELETION	
Camanan	COMMON TRANSPORT	RESPONSE COMMON TRANSPORT	COMMON TRANSPORT
Common Transport	CHANNEL SETUP	CHANNEL SETUP	CHANNEL SETUP
Channel Setup	REQUEST	RESPONSE	FAILURE
Common	COMMON TRANSPORT	COMMON TRANSPORT	COMMON TRANSPORT
Transport	CHANNEL	CHANNEL	CHANNEL
Channel	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION
Reconfiguration Common	REQUEST COMMON TRANSPORT	RESPONSE COMMON TRANSPORT	FAILURE
Transport	CHANNEL DELETION	CHANNEL DELETION	
Channel Deletion	REQUEST	RESPONSE	
Physical Shared	PHYSICAL SHARED	PHYSICAL SHARED	PHYSICAL SHARED
Channel	CHANNEL	CHANNEL	CHANNEL
Reconfigure	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION
[TDD] Audit	REQUEST AUDIT REQUEST	RESPONSE AUDIT RESPONSE	FAILURE 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
Cycotom	REQUEST SYSTEM INFORMATION	RESPONSE SYSTEM INFORMATION	FAILURE SYSTEM INFORMATION
System Information	UPDATE REQUEST	UPDATE RESPONSE	UPDATE FAILURE
Update	or British Register	OF BATTE REGISTROE	or BATE I ALEGAE
Common	COMMON MEASUREMENT	COMMON	COMMON
Measurement	INITIATION REQUEST	MEASUREMENT	MEASUREMENT
Initiation Radio Link	RADIO LINK ADDITION	RADIO LINK ADDITION	INITIATION FAILURE RADIO LINK ADDITION
Addition	REQUEST	RESPONSE	FAILURE
Radio Link	RADIO LINK DELETION	RADIO LINK DELETION	
Deletion	REQUEST	RESPONSE	DADIO LINIK
Synchronised Radio Link	RADIO LINK RECONFIGURATION	RADIO LINK RECONFIGURATION	RADIO LINK RECONFIGURATION
Reconfiguration	PREPARE	READY	FAILURE
Preparation			171120112
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 REQUEST	SYNCHRONISATION	SYNCHRONISATION
Initiation [TDD]		INITIATION RESPONSE	INITIATION FAILURE
Cell Synchronisation	CELL SYNCHRONISATION RECONFIGURATION	CELL SYNCHRONISATION	CELL SYNCHRONISATION
Reconfiguration	REQUEST	RECONFIGURATION	RECONFIGURATION
[TDD]		RESPONSE	FAILURE
Cell	CELL SYNCHRONISATION	CELL	CELL
Synchronisation	ADJUSTMENT REQUEST	SYNCHRONISATION	SYNCHRONISATION
Adjustment [TDD]		ADJUSTMENT	ADJUSTMENT FAILURE
Information	INFORMATION EXCHANGE	RESPONSE INFORMATION	INFORMATION
Exchange	INITIATION REQUEST	EXCHANGE INITIATION	EXCHANGE INITIATION
Initiation		RESPONSE	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 Measurement Reporting		
0	REPORT	
Common Measurement	COMMON MEASUREMENT	
Termination	TERMINATION REQUEST	
Common Measurement Failure	COMMON MEASUREMENT	
O and a series I De Parlie I and	FAILURE INDICATION	
Synchronised Radio Link	RADIO LINK RECONFIGURATION	
Reconfiguration Commit	COMMIT	
Synchronised Radio Link	RADIO LINK RECONFIGURATION	
Reconfiguration Cancellation	CANCELLATION	
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]	LINDI COLL DECOLIDOS INDICATION	
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	
0.11.0	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	

8.2 NBAP Common Procedures

8.2.1 Common Transport Channel Setup

8.2.1.1 General

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

8.2.1.2 Successful Operation

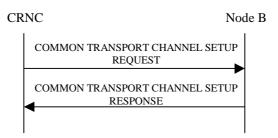


Figure 1: Common Transport Channel Setup procedure, Successful Operation

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

One message can configure only one of the following combinations:

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

Secondary CCPCH:

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

[TDD - When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains one or more Secondary CCPCHs, the Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.]

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

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains one or several FACHs, the Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PCH and a PICH, the Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

PRACH:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PRACH, the Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[1.28Mcps TDD – FPACH]:

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

[FDD-PCPCHs]:

When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains PCPCHs, the Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

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

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

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in Channel Request Parameters IE, the Node B shall use AP sub channel number to distinguish the PCPCHs.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message includes *AP Sub Channel Number* IE in SF Request Parameters IE, the Node B shall use AP sub channel number to distinguish the requested Spreading Factors.

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

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 Node B and the common physical channels exist on the Uu interface.

8.2.1.3 Unsuccessful Operation

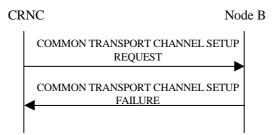


Figure 2: Common Transport Channel Setup procedure, Unsuccessful Operation

If the 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 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
- Unknown C-ID
- 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

Transport Layer Cause

Transport Resources Unavailable

Protocol Cause

- Semantic error
- Message not compatible with receiver state

Miscellaneous Cause

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

8.2.1.4 Abnormal Conditions

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

[FDD – If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains the *CD Sub Channel Numbers* IE, but the *CD Signatures* IE is not present, 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.

One message can configure only one of the following combinations:

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

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

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

FACH: When one or several FACHs are present Node B shall reconfigure the indicated FACHs.

[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 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 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 FACH shall use.

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

PCH: When the PCH is present Node B shall reconfigure the indicated PCH.

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

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

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

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

PICH: When a PICH is present 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.

[FDD – PRACH]: When a PRACH is present Node B shall reconfigure the indicated PRACH.

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

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

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Allowed Sub Channel Information, the Node B shall reconfigure the sub channel numbers that the PRACH shall use.

[FDD – AICH]: When a AICH is present Node B shall reconfigure the indicated AICH.

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

[FDD – CPCH]: When a CPCH is present Node B shall reconfigure the indicated CPCH.

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

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes Initial DL transmission Power Information, the Node B shall reconfigure the Initial DL transmission Power for the CPCH.

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

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

[FDD – AP-AICH]: When a AP-AICH is present Node B shall reconfigure the indicated AP-AICH.

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

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

[FDD-CD/CA-ICH]: When a CD/CA-ICH is present Node B shall reconfigure the indicated CD/CA-ICH.

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

[1.28Mcps TDD - FPACH]: If the FPACH 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.

After a successful procedure, the channels will have adopted the new configuration in Node B. The channels in the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message shall remain in the same state as prior to the procedure. 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

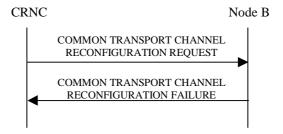


Figure 4: Common Transport Channel Reconfiguration procedure, Unsuccessful Operation

If the Node B is not able to support all or parts 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 RECONGURATION FAILURE message.

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Unknown C-ID
- Power level not supported
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Protocol Cause

Semantic error

Miscellaneous Cause

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

8.2.2.4 Abnormal Conditions

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8.2.3 Common Transport Channel Deletion

8.2.3.1 General

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

8.2.3.2 Successful Operation

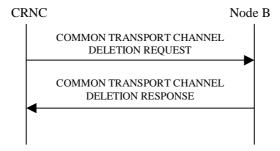


Figure 5: Common Transport Channel Deletion procedure, Successful Operation

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

Secondary CCPCH: When the COMMON TRANSPORT CHANNEL DELETION REQUEST message

contains a Secondary CCPCH, 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.

PRACH: When the COMMON TRANSPORT CHANNEL DELETION REQUEST message

contains a PRACH, Node B shall delete the indicated channel and the RACH supported by

the PRACH. [FDD - The AICH associated with the RACH shall also be deleted.]

[FDD – PCPCHes]: When the COMMON TRANSPORT CHANNEL DELETION REQUEST message

contains one of PCPCHes for a CPCH, Node B shall delete all PCPCHs associated with the indicated channel and the CPCH supported by the PCPCHes. The AP-AICH and CD/CA-

ICH associated with the CPCH shall also be deleted.

[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 Node B. The channels in the COMMON TRANSPORT CHANNEL DELETION REQUEST message shall be set to state Not Existing ref. [6]. 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

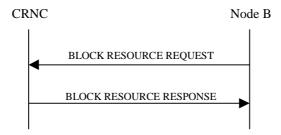


Figure 6: Block Resource procedure, Successful Operation

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

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.

The BLOCK RESOURCE REQUEST message shall include the *Shutdown Timer* IE when the *Blocking Priority Indicator* IE 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 in the 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)], [128Mcps 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

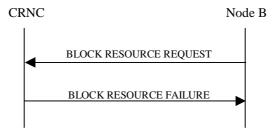


Figure 7: Block Resource procedure, Unsuccessful Operation

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:

Protocol Cause

Semantic error

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. Node B shall enable [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.

When the logical resource indicated is a cell, all associated physical channels and transport channels are 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.

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-sync 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

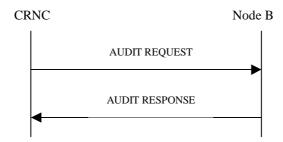


Figure 10: Audit procedure, Successful Operation

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

If the *Start of Audit Sequence* 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* 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 AuditSequence 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 AuditSequence 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 and the *Minimum DL Power Capability* IE when any of those values are known by the Node B.

[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 Node B internal resources are pooled for a group of cells, the Node B shall include one *Local Cell Group Information* IE containing Node B internal resource capacity and consumption laws per group of cells. 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.

The Node B shall include for each local cell present in the Node B the Node B internal resource capability and consumption laws within the *Local Cell Information* IE. If the *UL Capacity Credit* IE is not present, 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.

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 also include one *Communication Control Port Information* IE for each communication control port in the Node B.

8.2.7.3 Unsuccessful Operation

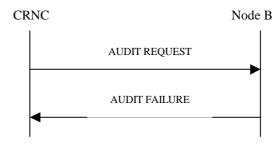


Figure 10A: Audit procedure, Unsuccessful Operation

If the Node B receives the AUDIT REQUEST message with the *Start of Audit Sequence* 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.

Typical cause values for the AUDIT FAILURE message are:

Protocol Causes:

Message not Compatible with Receiver State

8.2.7.4 Abnormal Conditions

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

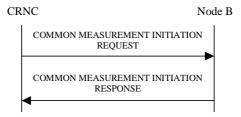


Figure 11: Common Measurement Initiation procedure, Successful Operation

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 Time Slot Information is provided in the *Common Measurement Object Type* IE , the measurement request shall apply to the requested time slot individually.]

[FDD - If the Spreading Factor Information is provided in the *Common Measurement Object Type* IE, measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of Spreading Factor Information.

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 measurement report or in the measurement response, 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' and the *SFN Reporting Indicator* IE is ignored.

If the *SFN* IE is provided, it indicates the frame for which the first measurement 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].

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.

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', the Node B shall report the result of the requested measurement immediately.

If the *Report Characteristics* IE is set to 'Periodic', the Node B shall periodically initiate a 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 *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 no hysteresis time is given, 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 Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, 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 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/falling time has elapsed since the previous event reporting.

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 more 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 rising/falling time has elapsed since the previous event reporting.

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 terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, 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 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 terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, 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 'On Modification', the Node B shall report the result of the requested measurement immediately. 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 Frame for LCS':

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 from the physical layer measurement, 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 $n = 0$

$$F_n = (M_n - M_{n-1}) \bmod 37152912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) *10*3.84*10^3*16 + F_{n-1}$$
for $n > 0$

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

 M_n is the latest measurement result received from the physical layer measurements, measured at SFN_n.

 M_{n-1} is the previous measurement result received from the physical layer measurements, measured at SFN_{n-1}.

 M_1 is the first measurement result received from the physical layer measurements after 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 from the physical layer measurement, 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:

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

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

$$F_n = min(abs(M_n - P_n), abs(M_n - P_n - 37158912000000), abs(M_n - P_n + 37158912000000))$$
 for $n > 0$

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

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

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

abs denotes the absolute value.

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

 M_n is the latest measurement result received from the physical layer measurements, measured at SFN_n.

 M_1 is the first measurement result received from the physical layer measurements after first Common Measurement Reporting at initiation or after the last event was triggered.

The $T_{UTRAN-GPS}$ Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

2. If the Common Measurement Type IE is set to 'SFN-SFN Observed Time Difference':

If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received from the physical layer measurement, calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggred the event and set n equal to zero when _F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

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

$$F_n = (M_n - a) \mod 40960 \text{ for } n > 0$$

 F_n is the change of the SFN-SFN

value expressed in unit [1/16 chip] when n measurement results has been received after 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 from the physical layer measurements, measured at SFN_n.

 M_1 is the first measurement result received from the physical layer measurements after 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 from the physical layer measurement, update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggred the event and set n equal to zero when the F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

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

$$P_n = ((a*(15*((SFN_n - SFN_{n-1}) \bmod 4096) + (TS_n - TS_{n-1}))*2560*16 + P_{n-1}) \bmod 40960) - 20480 \quad for \\ n > 0$$

$$F_n = min(abs(M_n - P_n), abs(M_n - P_n - 40960), abs(M_n - P_n + 40960))$$
 for $n > 0$

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

 M_n is the latest measurement result received from the physical layer measurements, measured at the Time Slot TS_n of the Frame SFN_n.

 M_I is the first measurement result received from the physical layer measurements after first Common Measurement Reporting at initiation or after the last event was triggered.

The $T_{UTRAN-GPS}$ Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

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 any more the Node B shall terminate the measurement locally 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

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

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

Common measurement accuracy

If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', 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.

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 when the *Report Characteristics* IE is set to "On-Demand", or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain 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 Frame for LCS'.

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.

8.2.8.3 Unsuccessful Operation

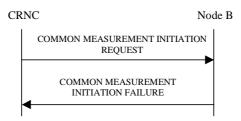


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the common measurement type requires the Time Slot Information but the *Time Slot* IE is not provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.]

[TDD - If the common measurement type requires the Time Slot Information but the *Time Slot* IE is not provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message sent 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.

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 Frame for LCS', but the $T_{UTRAN-GPS}$ Measurement Accuracy Class IE in the Common Measurement Accuracy IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

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

Table 4: Allowed Common measurement type and Report characteristics type combinations

Common measurement type	Report characteristics type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received total wide band power	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	Х	X	Х	Х	X	Х	Х	
Acknowledged PRACH preambles	Х	Х	X	Х	Х	X	Х	Х	
UL Timeslot ISCP	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	
Acknowledged PCPCH Access Preambles	Х	Х	Х	Х	Х	Х	Х	Х	
Detected PCPCH Access Preambles	Х	Х	Х	Х	Х	Х	Х	Х	
UTRAN GPS Timing of Cell Frames for LCS	Х	Х							X
SFN-SFN Observed Time Difference	Х	Х							X

Typical cause values are as follows:

Radio Network Layer Cause

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

8.2.8.4 Abnormal Conditions

If the COMMON MEASUREMENT 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.

8.2.9 Common Measurement Reporting

8.2.9.1 General

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

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the Measurement not available shall be reported.

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 measurements corresponding to the Common Measurement ID.

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 Node B. The CRNC takes the cell, identified via the *C-ID* IE, into service and uses the resources in Node B identified via the *Local Cell ID* IE.

8.2.12.2 Successful Operation

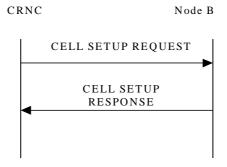


Figure 16: Cell Setup procedure, Successful Operation

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

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

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

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

[TDD - If the *Reference SFN offset* IE is included in the CELL SETUP REQUEST message, 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 B shall ignore the *Reference SFN offset* IE if included.]

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.

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

8.2.12.3 Unsuccessful Operation

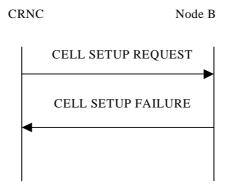


Figure 17: Cell Setup procedure: Unsuccessful Operation

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

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 CRNC.

In this case the cell is Not Existing in Node B. The Configuration Generation ID shall not be changed in 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
- Unknown Local Cell ID
- Power level not supported
- Node B Resources unavailable
- IPDL not supported

Protocol Cause

Semantic error

Miscellaneous Cause

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

8.2.12.4 Abnormal Conditions

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8.2.13 Cell Reconfiguration

8.2.13.1 General

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

8.2.13.2 Successful Operation

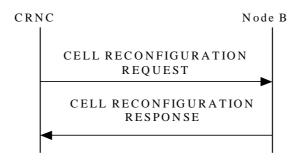


Figure 18: Cell Reconfiguration procedure, Successful Operation

The procedure is initiated with a CELL RECONFIGURATION REQUEST message sent from CRNC to Node B. 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 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 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 Primary CPICH power in the cell according to the *Primary CPICH Power* IE value. 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 SCH power in the cell according to the *SCH Power* IE value.]

[3.84Mcps 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 BCH power in the cell according to the *BCH Power* IE value.]

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

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

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timeslot Information* IE the Node B shall reconfigure switching-point structure in the cell according to the *Timeslot* IE value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes any of the *Constant Value* IEs, the Node B shall use these values when generating the appropriate SIB.]

If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information* IE with the *IPDL Indicator* IE having the value 'active' the Node B shall apply the IPDL in that cell according the latest downloaded parameters defined by the *IPDL FDD Parameters* IE / *IPDL TDD Parameters* IE.

If the CELL RECONFIGURATION REQUEST message includes *IPDL Parameter Information* IE with *the IPDL Indicator* IE having 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 IE value. 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.

8.2.13.3 Unsuccessful Operation

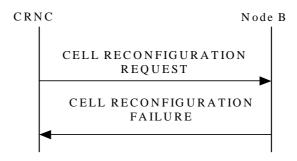


Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation

If the *IPDL Indicator* IE having 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 response with CELL RECONFIGURATION FAILURE- message with the cause value 'IPDL already activated'.]

If the *IPDL Indicator* IE having the value 'active' is included in the CELL RECONFIGURATION REQUEST message and there is no IPDL stored to Node B defining the IPDL, the Node B shall response with CELL RECONFIGURATION FAILURE- message with the cause value 'IPDL parameters not available'.]

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 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 Node B.

The Cause IE shall be set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Unknown C-ID
- Power level not supported
- Node B Resources unavailable
- IPDL not supported
- IPDL already activated
- IPDL parameters not available

Protocol Cause

Semantic error

Miscellaneous Cause

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

8.2.13.4 Abnormal Conditions

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8.2.14 Cell Deletion

8.2.14.1 General

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

8.2.14.2 Successful Operation

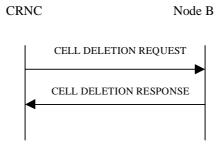


Figure 10: Cell Deletion procedure, Successful Operation

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

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

8.2.14.3 Unsuccessful Operation

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8.2.14.4 Abnormal Conditions

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

8.2.15 Resource Status Indication

8.2.15.1 General

This procedure is used in the following cases:

- 1. When a Local Cell becomes Existing at the Node B.
- 2. When a Local Cell is to be deleted in Node B, i.e. become 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 Node B.
- 5. When common physical channels and/or common transport channels have changed their capabilities at a Node B.
- 6. When a communication control port changed its resource operational state at the Node B.
- 7. When a Local Cell Group has changed its resource capability at the Node B.

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

8.2.15.2 Successful Operation



Figure 21: Resource Status Indication procedure, Successful Operation

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

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 with the *Indication Type* IE set equal to "No Failure", 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 is not already reported in a previous RESOURCE STATUS INDICATION message, the Node B shall include the capacity credits and the consumption laws in the *Local Cell Group Information* IE.

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

[TDD - The Node B shall include the *Reference Clock availability* IE within the *Local Cell* IE to indicate the availability of a Reference clock connected to the Local Cell, when a Local Cell is made available to the CRNC.]

Local Cell Deletion:

When a Local Cell is to be deleted in Node B, i.e. become Not Existing, the Node B shall withdraw the Local Cell from the CRNC by sending a RESOURCE STATUS INDICATION message with the *Indication Type* IE set equal to "No Failure", the *Local Cell ID* IE and the *Add/Delete Indicator* IE set equal 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 with the *Indication Type* IE set equal to "Service Impacting" and the Local Cell ID. The Node B shall include the *Minimum DL Power Capability* IE when it is known by the Node B. If the DL power capability has changed, the new capability shall be indicated in the *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 maximum DL power capability of the Local Cell is affected, this shall be reported using the *Maximum DL Power Capability* IE.

Capability Change of a Cell:

When the capabilities and/or resource operational state of a cell changes at the Node B, the Node B shall report the new capability and/or resource operational state by sending a RESOURCE STATUS INDICATION message with the *Indication Type* IE set equal to "Service Impacting", the *C-ID* IE, 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 with the *Indication Type* IE set equal to "Service Impacting", 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 Node Bs, it shall be reported to the CRNC in the RESOURCE STATUS INDICATION message, with the *Resource Operational State* IE set to "Enabled", the *Availability Status* IE set to "Degraded" and the *Cause* IE set to "Power level not supported". Affected channels shall use the nearest power value that is supported.

Capability Change of a Communication Control Port:

When the resource operational state of a communication control port has changed, the Node B shall report the new resource operational state by sending a RESOURCE STATUS INDICATION message with the *Indication Type* IE set equal to "Service Impacting" 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 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 with the *Indication Type* IE set equal to "Service Impacting" 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* IEand the *UL Capacity Credit* IEthen 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.

General:

When the RESOURCE STATUS INDICATION 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 is used to clear errors, only all errors for one object can be cleared per message. It is not possible to clear one out of several errors for one object.

8.2.15.3 Abnormal Conditions

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8.2.16 System Information Update

8.2.16.1 General

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

8.2.16.2 Successful Operation

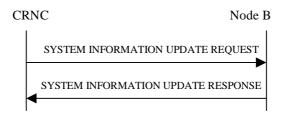


Figure 22: System Information Update procedure, Successful Operation

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

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 content updates) indicated in the SYSTEM INFORMATION UPDATE REQUEST message shall be applied by 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 the *IB Deletion Indicator* IE value is set to 'Deletion' 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

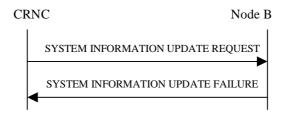


Figure 23: System Information Update procedure: Unsuccessful Operation

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. No changes to the BCCH schedule are made in this case.

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

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;

Possible cause values are:

Radio Network Layer Cause

- Unknown C-ID
- SIB Origination in Node B not Supported
- BCCH scheduling error

Miscellaneous Cause

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

In the case of failure, 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.

8.2.16.4 Abnormal Conditions

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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 RL Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs on one radio link.]

[TDD – The RL Setup procedure is used for establish one radio link including one or more transport channels. The transport channels can be a mixture of DCHs, DSCHs, and USCHs, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

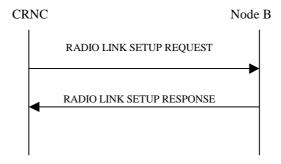


Figure 24: Radio Link Setup procedure, Successful Operation

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

Upon reception of 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 Info* IE with multiple *DCH Specific Info* IEs then, the Node B shall treat the DCHs in the *DCH Info* 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 – 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 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 to be added 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 to be added as the Time of Arrival Window Start Point 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 to be added as the Time of Arrival Window End Point 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.

[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", then 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. Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. 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 with the *Diversity Indication* IE whether the RL is combined or not. In case of combining, only the *Reference RL ID* IE shall be included to indicate one of the existing RLs that the concerned RL is combined with. In case of not combining the Node B shall include in the RL SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

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

In case of coordinated DCH, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the coordinated DCHs.

DSCH(s):

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

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFC12 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IE's. The *Binding ID* IE and *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

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

[TDD - USCH(s)]:

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

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

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

[FDD – 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 [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *p*th to "*PhCH number p*".]

General:

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

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

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

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

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

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

Radio Link Handling:

[FDD – Transmit Diversity]:

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

DL Power Control:

[FDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the Uu is achieved for the RLS or a DL POWER CONTROL REQUEST message is received. 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.].

[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 life time 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]).]]

[TDD – The Node B shall start the DL transmission using the initial DL power specified in the message on each DL DPCH and on each Time Slot of the RL until the UL synchronisation on the Uu 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), but shall always be kept within the maximum and minimum limit specified in the RL SETUP REQUEST message.]

[TDD – If the [3.84Mcps TDD – *DL Time Slot ISCPInfo* IE] or [1.28Mcps TDD – *DL Timeslot ISCP 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], 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]]

General:

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the SSDT Cell Identity for EDSCHPC IE, the Node B shall activate enhanced DSCH power control, if supported, using the SSDT Cell Identity for EDSCHPC IE and SSDT Cell Identity Length IE as well as Enhanced DSCH PC IE in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both SSDT Cell Identity IE

and SSDT Cell Identity for EDSCHPC IE, then the Node B shall ignore the value in SSDT Cell Identity for EDSCHPC IE]

[FDD - Radio Link Set Handling]:

[FDD – The *First RLS Indicator* IE indicates if the concerning 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 concerning RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

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

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

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

Response Message:

If the RLs are successfully established, the Node B shall start reception on the new RL(s) and respond with a RADIO LINK SETUP RESPONSE message.

After sending of the RADIO LINK SETUP RESPONSE message the Node B shall continuously attempt to obtain UL synchronisation on the Uu and start reception on the new RL. [FDD – The Node B shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].] [TDD – The Node B shall start transmission on the new RL immediately 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.]

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.

Typical cause values are as follows:

Radio Network Layer Cause

- RL Already Activated/allocated
- Combining not supported

- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Invalid CM Settings
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- DPC mode change not supported

Transport Layer Cause

- Transport Resources Unavailable

Protocol Cause

- Semantic error

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.]

8.2.18 Physical Shared Channel Reconfiguration [TDD]

8.2.18.1 General

This procedure is 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.

8.2.18.2 Successful Operation

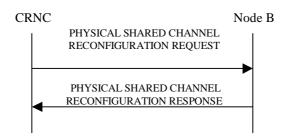


Figure 26: Physical Shared Channel Reconfiguration: Successful Operation

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

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN* IE the Node B will activate the new configuration on that specified SFN.

PDSCH/PUSCH Addition

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.

PDSCH/PUSCH Modification

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 - TDD Channelisation Code IE, Midamble shift and burst type IE, Time Slot IE], [1.28Mcps TDD - TDD Channelisation Code LCR IE, Midamble shift LCR IE, Time Slot LCR IE], TDD Physical Channel Offset IE, Repetition Period IE, Repetition Length IE, or TFCI presence IE the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.

PDSCH/PUSCH Deletion

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

In the successful case, 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, and shall make these available to all the current and future DSCH and USCH transport channels; and shall respond with PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE:

8.2.18.3 Unsuccessful Operation

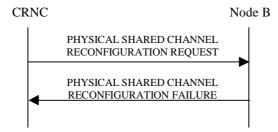


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Opreration

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 Value* IE shall be set to an appropriate value.

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

Typical cause values are as follows:

Radio Network Layer Cause

- Cell not available
- Node B Resources unavailable

Transport Layer Cause

- Transport Resources Unavailable

Protocol Cause

- Semantic error

Miscellaneous Cause

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

8.2.18.4 Abnormal Conditions

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8.2.19 Reset

8.2.19.1 General

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

8.2.19.2 Successful Operation

8.2.19.2.1 Reset Initiated by the CRNC

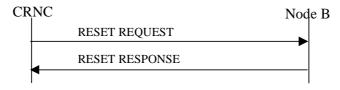


Figure 27A Reset procedure (CRNC to Node B), Successful Operation

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

If the *Reset Indicator* IE is set to 'CommunicationContext', the Node B shall remove all the indicated Node B Communication Contexts (typically identified by a *Node B 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 'CommunicationControlPort', 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

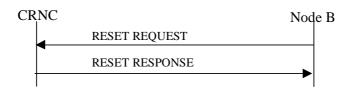


Figure 27B Reset procedure (Node B to CRNC), Successful Operation

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

If the *Reset Indicator* IE is set to 'CommunicationContext', for all indicated CRNC Communication Contexts (indicated by a *CRNC 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 'CommunicationControlPort', 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 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 cell sync bursts and/or to start measurements on cell sync bursts in a Node B.

8.220.2 Successful Operation

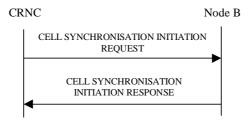


Figure 27C Cell Synchronisation Initiation procedure, Successful Operation

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 cell sync bursts if requested.

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 sync bursts. Transmission of the indicated cell sync bursts shall be started only if the frequency locking is performed successfully and 'Frequency Acquisition completed' is reported to the RNC.

Cell Sync Burst Transmission Initiation

When the Cell Sync Burst Transmission Initiation Information is present, the Node B shall configure the transmission of the cell sync 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 sync bursts.

Cell Sync Burst Measurement characteristics

When the Cell Sync Burst Measurement Initiation Information is present, the Node B shall initiate measurements on the indicated cell sync burst.

In case the *SFN* IE is present, the Node B shall after measurement of the indicated cell sync burst 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 cell sync burst measurement shall be performed. Whenever the Cell Synchronisation Initialtion procedure is initiated, only the 'Frequency Acquisition completed' or 'Frame related' report characteristic type shall apply.

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 sync burst measurement after every measured frame.

Response message

If the Node B was able to initiate the cell sync burst 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.

8.220.3 Unsuccessful Operation

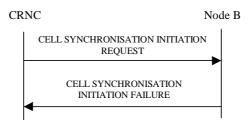


Figure 27D Cell Synchronisation Initiation procedure, Unsuccessful Operation

If the requested transmission or measurement on cell sync bursts 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

- Unknown C-ID.
- 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 cell sync bursts and/or to reconfigure measurements on cell sync bursts in a Node B.

8.2.21.2 Successful Operation

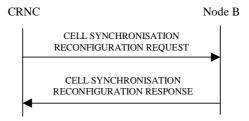


Figure 27E Cell Synchronisation Reconfiguration procedure, Successful Operation

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 cell sync burst transmission and/or measurements according to the parameters given in the request.

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 the IE 'Number of cycles per SFN period'

Repetition period: Cycle length / value of IE 'Number of repetitions per cycle period'

Cell Sync Frame number is calculated by:

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

 $k = \{1, 2, 4, ... \text{ Number of cycle per SFN period}\}$

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

Cell Sync Burst Transmission Reconfiguration

When the Cell Sync Burst Transmission Reconfiguration Information is present, the Node B shall reconfigure the transmission of the cell sync burst according to the parameters given in the CELL SYNCHRONISATION RECONFIGURATION REQUEST message.

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.

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.

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 sync burst in the cell according to the *DL transmission Power* IE value.

Cell Sync Burst Measurement Reconfiguration

When the Cell Sync Burst Measurement Reconfiguration Information is present, the Node B shall reconfigure the cell sync burst measurements according the parameters given in the message.

If the CELL SYNCHRONISATION RECONFIGURATION REQUEST message includes the Cell Sync Burst Measurement Information the measurements shall apply on the individual cell sync bursts on the requested Sync Frame number.

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 sync 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 cell sync burst 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 cell sync burst 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 cell sync burst 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 cell sync burst measurement when the cell sync burst timing rises or falls more than the requested threshold value compared to the arrival time in synchronised state which is represented by the *Cell Sync Burst Arrival Time* IE.

Response message

If the Node B was able to reconfigure the cell sync burst 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

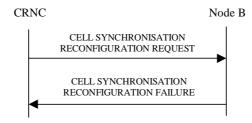


Figure 27F Cell Synchronisation Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot reconfigure the requested transmission or measurement on cell sync burst, 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

- Unknown C-ID.
- 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 cell sync burst 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 cell sync bursts 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.

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 cell sync burst 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 transmission of cell sync bursts or reporting of cell sync burst measurements corresponding to the CSB Transmission Id or CSB Measurement Id.

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 synchronisation burst 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 cell sync bursts can no longer be supported.

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

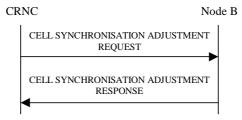


Figure 27J Cell Synchronisation Adjustment, Successful Operation

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.

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.

If the CELL SYNCHRONISATION ADJUSTMENT REQUEST message includes the *DL Transmission Power* IE the Node B shall apply the transmission power of the cell sync burst according to the *DL Transmission Power* IE value.

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

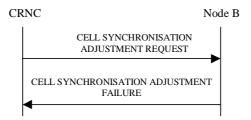


Figure 27K Cell Synchronisation Adjustment, Unsuccessful Operation

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

- Unknown C-ID.
- Cell Synchronisation Adjustment not supported
- Power level not supported

Miscellaneous Cause

- O&M Intervention
- HW failure

8.2.25.4 Abnormal Conditions

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8.2.26 Information Exchange Initiation

8.2.26.1 General

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

8.2.26.2 Successful Operation

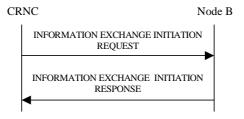


Figure 27L: Information Exchange Initiation procedure, Successful Operation

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

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

Information Report Characteristics

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

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

If the *Information Report Characteristics* IE is set to 'Periodic', the Node B shall 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 and then shall 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 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 *SatID* IEs.
- 3) If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Ionospheric Model', the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- 4) If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS UTC Model', the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the t_ot 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 any change 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.

Response message

If the Node B was 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 REQUEST message.

If the Requested Data Value IE is included in the INFORMATION EXCHANGE INITIATION RESPONSE message, it shall include at least one IE.

8.2.26.3 Unsuccessful Operation

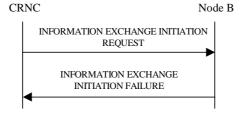


Figure 27M: Information Exchange Initiation procedure, Unsuccessful Operation

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

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

Typical cause values are as follows:

Radio Network Layer Cause

Information temporarily not available.

Information Provision not supported for the object.

8.2.27.4 Abnormal Conditions

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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.

8.3 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

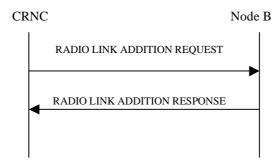


Figure: 28 Radio Link Addition procedure, Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the CRNC to the Node B.

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

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

[FDD - Compressed Mode]:

[FDD – If the RADIO LINK ADDITION REQUEST 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 RADIO LINK ADDITION REQUEST 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 *p*th 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.]

[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.]

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

In the case of combining an RL with existing RL(s) the Node B shall indicate in the RADIO LINK ADDITION RESPONSE message with the Diversity Indication that the RL is combined. In this case the Reference RL ID shall be included to indicate one of the existing RLs that the new RL is combined with.

In the case of not combining an RL with existing RL(s), the Node B shall indicate in the RADIO LINK ADDITION RESPONSE message with the Diversity Indication that no combining is done. In this case the Node B shall include both the Transport Layer Address and the binding ID for the transport bearer to be established for each DCH, [TDD – DSCH, USCH] of the RL in the RADIO LINK ADDITION RESPONSE message.

In case of coordinated DCH, the binding ID and the transport address shall be included for only one of the coordinated DCHs.

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

[FDD – Transmit Diversity]:

[FDD – When *Diversity Mode* IE is "STTD", "Closedloop mode1", or "Closedloop mode2", the DRNC shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE.]

[FDD – When *Transmit Diversity Indicator* IE is present Node B shall activate/deactivate the Transmit Diversity to 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 of the RL when starting transmission until either UL synchronisation on the Uu is achieved for the RLS or a DL POWER REQUEST message is received. If no *Initial DL Transmission power* IE is included, the Node B shall use any transmission power level currently used on already existing RL's for this UE. 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=0 and the downlink power control procedure (see 8.3.7).]

[TDD – If the RADIO LINK ADDITION REQUEST message includes the [3.84Mcps TDD – *Initial DL Transmission Power* IE] [1.28Mcps TDD – *DL Time Slot ISCP Info LCR* IE], the Node B shall apply the given power 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 is achieved for the RL. If no *Initial DL Transmission power* IE is included, the Node B shall use any transmission power level currently used on already existing RL's for this UE. 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).]

If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL power* IE, the Node B shall store this value and never transmit with a higher power on any DL DPCH of the RL. If no *Maximum DL power* IE is included, any Maximum DL power stored for already existing RLs for this UE shall be applied.

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 of the RL. If no *Minimum DL power* IE is included, any Minimum DL power stored for already existing RLs for this UE shall be applied.

[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].

General:

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

[FDD – Radio Link Set Handling]:

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

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

[FDD – After addition of the new RL(s), the UL out-of-sync algorithm defined in [10] shall for each of the previously existing and newly established RL Set(s) use the maximum value of the parameters $N_{OUTSYNC_IND}$ and $T_{RLFAILURE}$, and the minimum value of the parameters N_{INSYNC_IND} , that are configured in the cells supporting the radio links of the RL Set.]

Response Message:

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

After sending of the RADIO LINK ADDITION RESPONSE message the Node B shall continuously attempt to obtain UL synchronisation on the Uu and start reception on the new RL. [FDD – The Node B shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].] [TDD – The Node B shall start transmission on the new RL immediately as specified in [16].]

8.3.1.3 Unsuccessful Operation

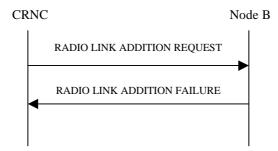


Figure 29: Radio Link Addition procedure: Unsuccessful Operation

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 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".]

Typical cause values are as follows:

Radio Network Layer Cause

- RL Already Activated/allocated
- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- UL SF not supported
- DL SF not supported

- Invalid CM Settings
- Reconfiguration CFN not elapsed
- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Protocol Cause

- Semantic error

Miscellaneous Cause

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

8.3.1.4 Abnormal conditions

-

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 all Radio Links related to one UE-UTRAN connection within a Node B.

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

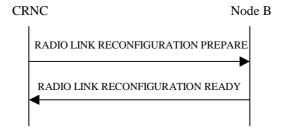


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION PREPARE 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* IEs 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 *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 multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a 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 then, 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.
- [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 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 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 radio interface in congestion situations within the Node B once the new configuration has been activated.
- 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 Start Point 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 End Point 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* IEs, the Node B shall not include the referenced DCHs in the new configuration.

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

Physical Channel Modification:

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

- [FDD If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the Node B shall set the new Uplink DPCCH Structure to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE then 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 DPCCH Slot Format* IE, group the Node B shall set the new Downlink DPCCH 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 and the IE is set to 'Used', the Node B shall use Limited Power Increase 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 and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *PDSCH code mapping* IE then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *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. 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.]

[TDD – UL/DL CCTrCH Modification]

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

- [TDD If the IE includes any of *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* or *DL DPCH to add* IEs, the Node B shall include this DPCH in the new configuration.]
- [TDD If the IE includes any *UL DPCH to delete* or *DL DPCH to delete* IEs, the Node B shall remove this DPCH in the new configuration.]
- [TDD If the IE includes any UL *DPCH to modify* or *DL DPCH to modify* IEs, and includes any of *Repetition Period* IE, *Repetition Length* IE, or *TDD DPCH Offset* IE or the message includes UL/DL Timeslot Information and includes any of [3.84Mcps TDD Midamble shift and Burst Type IE, Time Slot IE], [1.28Mcps TDD Midamble shift LCR IE, Time Slot LCR IE], or *TFCI presence* IE or the message includes UL/DL Code information and includes [3.84Mcps TDD *TDD Channelisation Code* IE], [1.28Mcps TDD *TDD Channelisation Code LCR* IE], 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.]

[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 *UL/DL DPCH Information* 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 a *DL CCTrCH to Add* IE, 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 – The Node B shall use the *UL SIR Target* IE in the *UL CCTrCH to Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCTrCH Deletion]

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

DSCH Addition/Modification/Deletion:

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

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist. The *Binding ID* IE and *Transport Layer Address* IE of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted then the Node B shall release the resources associated with that bearer in the new configuration.

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

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

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

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

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

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

[TDD – USCH Addition/Modification/Deletion:]

- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD 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 the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]

- [FDD If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD If the *RL Information* IE includes a *DL Code Information* IE containing a *DL Scrambling Code* IE, the Node B shall apply the scrambling code in the new configuration.]
- [FDD If the *RL Information* IE includes the *DL Code Information* IE containing a *DL Channelisation Code Number* IE, the Node B shall apply the channelisation code in the new configuration.]
- [FDD If the *RL Information* IE 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 whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- 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.
- [TDD If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH.until the UL synchronisation on the Uu is achieved for the CCTrCH. If no *Initial DL Transmission power* IE is included with a new CCTrCH, the Node B shall use any transmission power level currently used on already existing CCTrCH's 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.[22], subclause 4.2.3.3).]

General

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 exist a Prepared Reconfiguration, as defined in subclause 3.1.

In the RADIO LINK RECONFIGURATION READY message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the Transport Layer Address and the Binding ID for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the IE *DCH Information Response* IE.

In 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 *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, the RL Information Response IE shall be included only for one of the combined RLs. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.2.3 Unsuccessful Operation

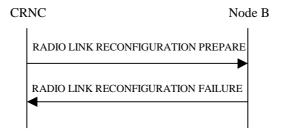


Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

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

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed if the *UL DPCH Information* IE does not include the *SSDT Cell Identity Length* IE. In this case, it shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

Typical cause values are as follows:

Radio Network Layer Cause

- UL SF not supported
- DL SF not supported
- Invalid CM Settings
- 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

Transport Layer Cause

- Transport Resources Unavailable

Protocol Cause

Semantic error

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 the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

8.3.3 Synchronised Radio Link Reconfiguration Commit

8.3.3.1 General

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

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.3.2 Successful Operation



Figure 32:Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation

The Node B shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the CRNC in the *CFN* IE when receiving the RADIO LINK RECONFIGURATION COMMIT message from the CRNC.

[FDD – If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the Node B.]

When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

In the case of a transport channel modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the indicated CFN.

[FDD – If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CFN* IE. From that moment on all Transmission Gap Pattern Sequence sincluded 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 concerning Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

8.3.3.3 Abnormal Conditions

If a new transport bearer is required for the new reconfiguration and it is not available at the requested CFN, the Node B shall initiate the Radio Link Failure procedure.

8.3.4 Synchronised Radio Link Reconfiguration Cancellation

8.3.4.1 General

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

The message shall use the Communication Control Port assigned for this Node B Communication Context.

8.3.4.2 Successful Operation



Figure 33:Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation

When receiving the RADIO LINK RECONFIGURATION CANCEL message from the CRNC, the Node B shall release the new configuration ([FDD - including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure and continue using the old

configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

8.3.4.3 Abnormal Conditions

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8.3.5 Unsynchronised Radio Link Reconfiguration

8.3.5.1 General

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

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

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

8.3.5.2 Successful Operation

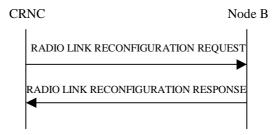


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION REQUEST 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* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes on 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, 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 multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH to Add* IEs, 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.
- [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 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 *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 radio interface in congestion situations within the Node B once the new configuration has been activated.
- 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 Start Point 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 End Point 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 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 coordinated DCHs in the new configuration.

[FDD - Physical Channel Modification:]

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

- [FDD – If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

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

- [FDD If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the use the information when building TFCIs in the new configuration.
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the 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 in the new configuration.]
- [FDD If the *DL DPCH Information* IE message includes the *Limited Power Increase* IE and the IE is 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. 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.]

[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/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.]

[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.]

RL Information:

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

- If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used.
- 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 of the Radio Link once the new configuration is being used.

- [FDD If the *RL Information* IE contains the *DL Code Information* IE for any of the allocated DL Channelisation code, the Node B shall apply the new setting when new compressed mode measurement are activated.]
- [FDD If the *RL Information* IE 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 whenever the downlink compressed mode method SF/2 is active in the new configuration.]

General

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.

In the RADIO LINK RECONFIGURATION RESPONSE message, the Node B shall include the *RL Information Response* IE for each affected Radio Link.

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 being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

In case of a DCH requiring a new transport bearer on Iub, the *Transport Layer Address* IE and the *Binding ID* shall be included in the IE *DCH Information Response* IE.

In 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 *DCH Information Response* IE shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, *RL Information Response* IE shall be included only for one of the combined Radio Links. The *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

8.3.5.3 Unsuccessful Operation

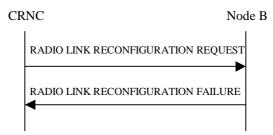


Figure 35: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of coordinated, 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.

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.

Typical cause values are as follows:

Radio Network Layer Cause

- Invalid CM Settings
- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Protocol Cause

- Semantic error

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.

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

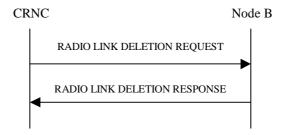


Figure 36: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the CRNC to the Node B.

Upon receipt of this message, the Node B shall delete the radio link(s) identified by the *RL ID* IE, *Node B Communication ID* IE and *CRNC Communication 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, and 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 ID* IE and *CRNC Communication ID* IE does not exists, the Node B shall response 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.

The Power Adjustment Type IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is *Common*, the Node B shall perform the power adjustment (see below) for all radio links associated with the context identified by the *Node B Communication Context ID* IE using a common DL reference power level.

If the value of the *Power Adjustment Type* IE is *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 value of the *Power Adjustment Type* IE is '*None*', the Node B shall suspend on going power adjustments for all radio links for the UE Context.

If the *Inner Loop DL PC Status* IE is present and set to 'Active', the Node B shall activate inner loop DL power control for all radio links for the Node B communication context. If the *Inner Loop DL PC Status* IE is present and set to 'Inactive', the Node B shall deactivate inner loop DL power control for all radio links for the Node B communication context according to ref. [10].

Power Adjustment

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see Ref. [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1-r)(P_{ref} + P_{P-CPICH} - P_{init})$$
 with an accuracy of ±0.5 dB

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE, Pref 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.

8.3.8.2 Successful Operation

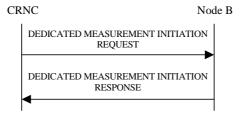


Figure 38: Dedicated Measurement Initiation procedure, Successful Operation

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 request. Unless specified below the meaning of the parameters are given in other specifications.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', this measurement request shall apply for all current and future Node B Communication Contexts controlled via the Communication Control Port on which the DEDICATED MEASUREMENT INITIATION REQUEST message was received. Otherwise, this measurement request shall apply for the requested Node B Communication Context ID only.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement request shall be treated as a single measurement, despite applying to multiple contexts. This means that it may only be terminated or failed on 'All NBCC'.

If the *Node B Communication Context ID* IE equals the reserved value 'All NBCC', the measurement shall be initiated only for those Node B Communication Contexts handling a mode (FDD, 3.84Mcps TDD or 1.28Mcps TDD) for which the concerned measurement is specified in [4] and [5].

If the *Dedicated Measurement Object Type* IE is set to "RL", measurement results shall be reported for all indicated Radio Links.

[FDD – If the *Dedicated Measurement Object Type* IE is set to "RLS", measurement results shall be reported for all indicated Radio Link Sets.]

[FDD - If the *Dedicated Measurement Object Type* IE is set to "ALL RL", 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* IE is set to "ALL RL", 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* IE is set to "ALL RLS", measurement results shall be reported for all existing and future Radio Link Sets within the Node B Communication Context.]

[TDD – If the DPCH ID IE is provided within the RL Information the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE 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.]

If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the measurement report or in the measurement response, 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].

If the *CFN* IE is provided, it indicates the frame for which the first measurement 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].

Report characteristics

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

If the *Report Characteristics* IE is set to 'On-Demand', the Node B shall return the result of the measurement immediately.

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 *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 no hysteresis time is given, 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 no hysteresis time is given, 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/falling time 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 rising/falling time 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 terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, 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 terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use

'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, 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(s) for which a measurement is defined exists any more 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

 $a = 1/2^{(k/2)}$, 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.

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.

Only in the case when *Report Characteristics* IE is set to "On-Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

In the case that the *Node B Communication Context ID* IE is set to 'All NBCC', the *CRNC Communication Context ID* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE shall be set to the value 'All CRNCCC', which is reserved for this purpose.

Interaction with Reset Procedure

If a measurement has been requested with the *Node B Communication Context ID* IE set to 'All NBCC', the Node B shall terminate the measurement locally if either the CRNC or the Node B initiates the Reset procedure for the relevant Communication Control Port or the entire Node B.

8.3.8.3 Unsuccessful Operation

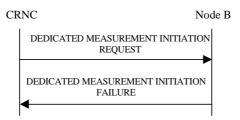


Figure 39: Dedicated Measurement Request procedure: Unsuccessful Operation

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 Object Type* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Dedicated Measurement Initiation procedure as failed.

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 that 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

-

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

If the achieved measurement accuracy does not fulfil the given accuracy requirement, the Measurement not available shall be reported.

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.

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 measurements corresponding to the received Dedicated Measurement ID.

8.3.10.3 Abnormal Conditions

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8.3.11 Dedicated Measurement Failure

8.3.11.1 General

This procedure is used by the Node B to notify the CRNC that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. The Node B is allowed to initiate the DEDICATED MEASUREMENT FAILURE INDICATION message at any time after having sent the RADIO LINK SETUP RESPONSE message, as long as the Node B communication context exists.

8.3.11.2 Successful Operation



Figure 42: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the Node B to the CRNC using the communication control port assigned to the Node B communication context, to inform the CRNC that a previously requested measurement can no longer be reported. The Node B has locally terminated the indicated measurement.

If the failed measurement was initiated with the *Node B Communication Context ID* IE set to the reserved value "All NBCC" and the Node B has terminated the measurement reporting of the measurement corresponding to the Measurement ID indicated in the DEDICATED MEASUREMENT FAILURE INDICATION message, the *CRNC Communication Context ID* IE shall be set to the value 'All CRNCCC'.

8.3.11.3 Abnormal Conditions

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8.3.12 Radio Link Failure

8.3.12.1 General

This procedure is used by 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

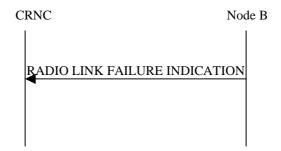


Figure 43: Radio Link Failure procedure, Successful Operation

When Node B detects that one or more Radio Link [FDD - or Radio Link Sets] [TDD – or CCTrCHs within a Radio Link] is no longer available, it sends the RADIO LINK FAILURE INDICATION message to CRNC indicating the

failed Radio Links or Radio Link Sets or CCTrCHs with the most appropriate cause values in the *Cause* IE. If the failure concerns one or more individual Radio Links the Node B shall indicate the affected Radio Link(s) using the *RL Information* IE. [FDD - 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 CCTrCH's within in a radio link the Node B shall indicate the affected CCTrCH's 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, the message shall be sent, with the cause value 'Synchronisation Failure', when indicated by the UL out-of-sync algorithm defined in [10] and [21]. [FDD – The algorithm 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 Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Links/Radio Link Sets due the overlapping of two or more compressed mode patterns during operation of compressed mode, 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 UE Context, or the UE Context itself.]

In the other cases Radio Link Failure procedure is used to indicate that one or more Radio Links/Radio Link Sets 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 UE Context, or the UE Context itself. When applicable, the retention priorities associated with the transport channels shall be used by the Node B to prioritise which Radio Links/Radio Link Sets to indicate as unavailable to the CRNC.

Typical cause values are:

Radio Network Layer Causes:

- Synchronisation Failure
- Invalid CM settings

Transport Layer Causes:

- Transport Resources Unavailable

Miscellaneous Causes:

- Control Processing Overload
- HW Failure
- O&M Intervention

8.3.12.3 Abnormal Conditions

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8.3.13 Radio Link Restoration

8.3.13.1 General

This procedure is used by the Node B to notify the achievement and re-achievement of uplink synchronisation of one or more [FDD - Radio Link Sets][TDD - Radio Links or CCTrCHs within a Radio Link] on the Uu.

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 sync detection algorithm defined in ref. [10] and [21]. [FDD – The algorithm in ref. [10] shall use the minimum value of the parameters N INSYNC IND that are configured in the cells supporting the radio links of the RL Set.]

[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 synchronization 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 Sets the Node B shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE.]

8.3.13.3 Abnormal Condition

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8.3.14 Compressed Mode Command [FDD]

8.3.14.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the Node B for one UE-UTRAN connection.

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 Node B shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CM Configuration Change CFN* IE requested by CRNC when receiving 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 concerning 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.

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.

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.

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

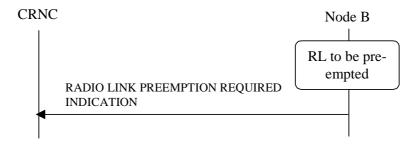


Figure 47B: RL Pre-emption procedure, Successful Operation

When 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. 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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8.4 Error Handling Procedures

8.4.1 Error Indication

8.4.1.1 General

The Error Indication procedure is initiated by a node in orderto 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.

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 available. 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 available.

When a message for a dedicated procedure is received in the Node B with an invalid *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 a message for a dedicated procedure is received in the CRNC with an invalid *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

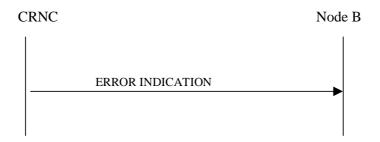


Figure 50: Error Indication procedure (CRNC to Node B), Successful Operation

8.4.1.3 Abnormal Conditions

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9 Elements for NBAP communication

9.1 Message Functional Definition and Content

9.1.1 General

Subclause 9.1 presents the contents of NBAP messages in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, where the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in ref. [26].

9.1.2 Message Contents

9.1.2.1 Presence

An information element can be of the following types:

M	IEs marked as Mandatory (M) shall always be included in the message.
0	IEs marked as Optional (O) may or may not be included in the message.
С	IEs marked as Conditional (C) shall be included in a message only if the condition is satisfied. Otherwise the IE shall not be included.

In case of an information element group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. The presence

field of the information elements inside one group defines if the information element is mandatory, optional or conditional <u>if the group is present.</u>

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/IE.

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

FDD Message 9.1.3.1

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	M		9.2.2.15	Corresponds to [7]: S- CCPCH,k	_	
>>>DL Scrambling Code	C-PCH		9.2.2.13		_	
>>>FDD DL Channelisation Code Number	M		9.2.2.14		_	
>>>TFCS	M		9.2.1.58	For the DL.	_	
>>>Secondary CCPCH Slot Format	М		9.2.2.43		_	
>>>TFCI Presence	C – SlotFormat		9.2.1.57	Refer to TS [7]	_	
>>>Multiplexing Position	М		9.2.2.23		_	
>>>Power Offset		1			_	
Information						
>>>P01	М		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>>PO3	М		Power Offset 9.2.2.29	Power offset for the pilot bits	_	
>>>STTD Indicator	М		9.2.2.48		_	
>>>FACH Parameters		0 <ma xnoofF ACHs></ma 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>>Transport Format Set	M		9.2.1.59	For the DL.	_	
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	M		9.2.1.60		_	
>>>Max FACH Power	M		DL Power 9.2.1.21	Maximum allowed power on the FACH.	_	
>>>PCH Parameters		01			YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	į
>>>Transport Format Set	М		9.2.1.59	For the DL.	_	

>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	М		9.2.1.60		_	
>>>PCH Power	M		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	M		9.2.1.49A		_	
>>>>PICH Mode	M		9.2.2.26	Number of	_	
				PI per frame		
>>>>STTD	M		9.2.2.48		_	
Indicator						
>PRACH						
>>PRACH		1				
>>>Common Physical	М		9.2.1.13		_	
Channel ID						
>>>Scrambling Code	М		9.2.2.42		_	
Number						
>>>TFCS	М		9.2.1.58	For the UL.	_	
>>>Preamble Signatures	М		9.2.2.31		-	
>>>Allowed Slot		1 <ma< td=""><td></td><td></td><td>_</td><td></td></ma<>			_	
Format Information		xnoofSI				
1 omat mormation		otForm				
		atsPRA				
>>>>RACH Slot	M	CH>	0.0.0.07			
	IVI		9.2.2.37		_	
Format			0.000			
>>>RACH Sub Channel	M		9.2.2.38		_	
Numbers			0.04.50	Fandha III		
>>>Puncture Limit	M		9.2.1.50	For the UL	_	
>>>Preamble Threshold	M		9.2.2.32		-	5
>>>RACH Parameters		1			YES	Reject
>>>Common	M		9.2.1.14		_	
Transport Channel ID						
>>>>Transport Format	M		9.2.1.59	For the UL.	_	
Set			ļ			
>>AICH Parameters		1	ļ		_	
>>>Common Physical	М		9.2.1.13		_	
Channel ID			1			
>>>AICH Transmission	М		9.2.2.1		_	
Timing						
>>>FDD DL Channelisation	М		9.2.2.14		_	
Code Number						
>>>AICH Power	М		9.2.2.D		1	
>>>STTD Indicator	М		9.2.2.48			
>PCPCHes						
>>CPCH Parameters		1			_	
>>>Common Transport	М		9.2.1.14		_	
Channel ID						
>>>Transport Format Set	М		9.2.1.59	For the UL.	_	
>>>AP Preamble	M		CPCH		_	
Scrambling Code			Scrambling			
00.0			Code			
	1	1	1	1		1

			Number			
			9.2.2.4B			
>>>CD Preamble Scrambling Code	М		CPCH Scrambling Code Number 9.2.2.4B		-	
>>>TFCS	М		9.2.1.58	For the UL	_	
>>>CD Signatures	O		Preamble Signatures 9.2.2.31	Note: When not present, all CD signatures are to be used.	-	
>>>CD Sub Channel Numbers			9.2.2.1C		_	
>>>Puncture Limit	М		9.2.1.50	For the UL	_	
>>>CPCH UL DPCCH Slot Format	M		9.2.2.4C	For UL CPCH message control part	_	
>>>UL SIR	М		UL SIR 9.2.1.67A			
>>>Initial DL transmission Power	M		DL Power 9.2.1.21		_	
>>>Maximum DL Power	M		DL Power 9.2.1.21		_	
>>>Minimum DL Power	M		DL Power 9.2.1.21		_	
>>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits	_	
>>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	_	
>>>FDD TPC DL Step Size	М		9.2.2.16		_	
>>>N_Start_Message	М		9.2.2.23C		_	
>>>N_EOT	М		9.2.2.23A		_	
>>>Channel Assignment Indication	M		9.2.2.1D		_	
>>>CPCH Allowed Total Rate	М		9.2.2.4A		_	
>>>PCPCH Channel Information		1 <ma xnoofP CPCHs ></ma 			-	
>>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>>CPCH Scrambling Code Number	M		9.2.2.4B	For UL PCPCH	_	
>>>>DL Scrambling Code	М		9.2.2.13	For DL CPCH message part	-	
>>>>FDD DL Channelisation Code Number	M		9.2.2.14	For DL CPCH message part	_	

>>>PCP Length	М		9.2.2.24A	T		
>>>>UCSM Information	C-NCA	1	3.2.2.24A		_	
>>>UCSW Information >>>>Min UL	M M	1	9.2.2.22		_	
Shannelisation Code	IVI		9.2.2.22		_	
Length						
>>>>NF_max	M		9.2.2.23B			
>>>>NF_max >>>>Channel	IVI	0	9.2.2.23B		_	
		0 <ma< td=""><td></td><td></td><td>_</td><td></td></ma<>			_	
Request Parameters		xAPSig				
AD Doorsels	N.4	Num>	0.0044			
>>>>AP Preamble	M		9.2.2.1A		_	
Signature >>>>AP Sub	0		0.0040			
	0		9.2.2.1B		_	
Channel Number	0.04	4		D.C. TO		
>>>VCAM Mapping	C-CA	1 <ma< td=""><td></td><td>Refer to TS</td><td>_</td><td></td></ma<>		Refer to TS	_	
Information		xnoofL		[18]		
Min III	N.4	en>	0.0.0.00			
>>>>Min UL	M		9.2.2.22		_	
Channelisation Code						
Length	NA.		0.0.0.00			
>>>NF_max	M		9.2.2.23B		_	
>>>>Max Number of	M		9.2.2.20A		_	
PCPCHes	1					
>>>SF Request		1 <ma< td=""><td></td><td></td><td>_</td><td></td></ma<>			_	
Parameters		xAPSig				
	+	Num>				
>>>>AP Preamble	M		9.2.2.1A		_	
Signature	+					
>>>>AP Sub Channel	0		9.2.2.1B		_	
Number						
>>>AP-AICH Parameters		1			_	
>>>Common Physical	M		9.2.1.13		_	
Channel ID						
>>>FDD DL	M		9.2.2.14		_	
Channelisation Code						
Number						
>>>AP-AICH Power	M		AICH		_	
			Power			
			9.2.2.D			
>>>CSICH Power	M		AICH	For CSICH	_	
			Power	bits at end of		
			9.2.2.D	AP-AICH		
			1	slot		
>>>STTD Indicator	M		9.2.2.48		_	
>>>CD/CA-ICH		1			_	
Parameters						
>>>Common Physical	M		9.2.1.13		_	
Channel ID						
>>>FDD DL	M		9.2.2.14		_	
Channelisation Code						
Number						
>>>CD/CA-ICH Power	М		AICH		_	
			Power			
			9.2.2.D			
>>>STTD Indicator	M		9.2.2.48		_	

Condition	Explanation
SlotFormat	The IE shall be present if the Secondary CCPCH Slot
	Format IE is set to any of the values from 8 to 17.
CA	The IE shall be present if the Channel Assignment
	Indication IE is set to "CA Active".
NCA	The IE shall be present if the Channel Assignment
	Indication IE is set to "CA Inactive".
PCH	The IE shall be present if the PCH parameters IE is
	not present.

Range bound	Explanation
MaxnoofFACHs	Maximum number of FACHs that can be defined on a
	Secondary CCPCH.
MaxnoofPCPCHs	Maximum number of PCPCHs for a CPCH
MaxnoofLen	Maximum number of Min UL Channelisation Code
	Length
MaxnoofSlotFormatsPRACH	Maximum number of SF for a PRACH
MaxAPSigNum	Maximum number of AP Signatures.

9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE type and	Semantics description	Criticality	Assigned Criticality
			reference			
Message Discriminator	M		9.2.1.45			
Message Type	M		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 channels to be configured	М				YES	ignore
>Secondary CCPCHs					_	
>>CCTrCH ID	М		9.2.3.3	For DL CCTrCH supporting one or several Secondary CCPCHs	_	
>>TFCS	М		9.2.1.58	For DL CCTrCH supporting one or several Secondary CCPCHs	-	
>>TFCI Coding	М		9.2.3.22		_	
>>Puncture Limit	М		9.2.1.50		_	
>>Secondary CCPCH		0 <ma xnoofS CCPC Hs></ma 		Mandatory For 3.84Mcps TDD only	GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>TDD Channelisation Code	М		9.2.3.19		_	
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble shift and Burst Type	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		_	
>>FACH		0 <ma xnoofF ACHs></ma 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>CCTrCH ID	М		9.2.3.3		_	
>>>Transport Format Set	M		9.2.1.59	For the DL.	_	
>>>ToAWS	M		9.2.1.61		_	
>>>ToAWE	M	+	9.2.1.60	-	_	

>>>Max FACH Power	0		DL Power 9.2.1.21	For 1.28Mcps TDD only	YES	reject
>>PCH		01		122 only	YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>CCTrCH ID	М		9.2.3.3		_	
>>>Transport Format	М		9.2.1.59	For the DL.	_	
Set						
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	М		9.2.1.60		_	
>>>PICH Parameters		01		Mandatory For 3.84Mcps TDD only	YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>TDD Channelisation Code	М		9.2.3.19		_	
>>>>Time Slot	М		9.2.3.23		_	
>>>>Midamble shift and Burst Type	М		9.2.3.7		_	
>>>TDD Physical Channel Offset	М		9.2.3.20		_	
>>>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		_	
>>>PCH Power	0		DL Power 9.2.1.21	For 1.28Mcps TDD only	_	
>>>PICH Parameters LCR		01		Mandatory For 1.28Mcps TDD only	YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>TDD Channelisation Code LCR	М		9.2.3.19a		_	
>>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble shift LCR	М		9.2.3.7A		_	
>>>>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		_	

Secondary CCDCII		0	<u> </u>	Mandatani	CLODAL	uniont.
>>Secondary CCPCH LCR		0 <ma xnoofS</ma 		Mandatory For	GLOBAL	reject
		-		1.28Mcps		
		CCPC		TDD only		
		HLCRs				
		>				
>>>Common Physical	М		9.2.1.13		-	
Channel ID						
>>>TDD Channelisation Code LCR	М		9.2.3.19a		-	
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble shift LCR	М		9.2.3.7A		_	
>>>TDD Physical	М		9.2.3.20		_	
Channel Offset						
>>>Repetition Period	М		9.2.3.16		_	
>>>Repetition Length	М		9.2.3.15		_	
>>>SCCPCH Power	М		DL Power		_	
			9.2.1.21			
>PRACH					_	
>>PRACH	М	01		Mandatory	YES	reject
				for 3.84Mcps		
				TDD only		
>>>Common Physical	M		9.2.1.13		_	
Channel ID			9.2.1.58			
>>>TFCS	M		9.2.1.58		_	
>>>Time Slot	M		9.2.3.23		_	
>>>TDD Channelisation Code	М				_	
>>>Max PRACH	М		9.2.3.6		_	
Midamble Shifts						
>>>PRACH Midamble	М		9.2.3.14		_	
>>>RACH		1			YES	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>>Transport Format Set	М		9.2.1.59	For the UL	-	
>>PRACH LCR				Mandatani	YES	
>>PRACH LCR		0 <maxn< td=""><td></td><td>Mandatory For</td><td>169</td><td>reject</td></maxn<>		Mandatory For	169	reject
		oofPR		1.28Mcps		
		ACHL		TDD only		
		CRs>		1 DD Only		
>>>Common Physical	М		9.2.1.13		-	
Channel ID			0.04.50			
>>>TFCS	M		9.2.1.58		_	
>>>Time Slot LCR	M		9.2.3.24A 9.2.3.19a		_	
>>>TDD Channelisation	M		9.2.3.19a		_	
Code LCR	NA.		9.2.3.6		_	
>>>Max PRACH Midamble Shifts	M		3.2.3.0		_	
>>>PRACH Midamble	M		9.2.3.14			
>>>RACH IVIIdamble	IVI	1	J.∠.J.14		YES	reject
>>>RACH >>>>Common	M	1	9.2.1.14		IEO -	reject
Transport Channel ID					_	
>>>>Transport Format Set	М		9.2.1.59	For the UL	-	
>>FPACH		01		Mandatory	GLOBAL	reject
]		for 1.28Mcps	0_00/12	. 0,000
				TDD only		

>>>Common Physical Channel ID	М	9.2.1.13	_	
>>>TDD Channelisation Code LCR	M	9.2.3.19a	_	
>>>Time Slot LCR	М	9.2.3.24A	_	
>>>Midamble shift LCR	М	9.2.3.7A	_	
>>>Max FPACH Power	M	9.2.3.5 ^E	_	

Range bound	Explanation
MaxnoofSCCPCHs	Maximum number of Secondary CCPCHs per
	CCTrCH for 3.84Mcps TDD.
MaxnoofS-CCPCHLCRs	Maximum number of Secondary CCPCHs per
	CCTrCH for 1.28Mcps TDD.
MaxnoofCCTrCHs	Maximum number of CCTrCHs that can be defined in
	a cell.
MaxnoofFACHs	Maximum number of FACHs that can be defined on a
	Secondary CCPCH.
MaxnoofPRACHLCRs	Maximum number of PRACH 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	М		9.2.1.62		_	
FACH Parameters info		0 <ma xnoofF ACHs></ma 		The FACH Parameters may be combined with PCH Parameters	GLOBAL	ignore
>FACH Parameters	M		Common Transport Channel Information Response 9.2.1.14A		-	
PCH Parameters	0		Common Transport Channel Information Response 9.2.1.14A	The PCH Parameters may be combined with FACH Parameters	YES	ignore
RACH parameters	0		Common Transport Channel Information Response 9.2.1.14A	The RACH Parameters shall not be combined with FACH Parameters or PCH Parameters	YES	ignore
CPCH parameters	O		Common Transport Channel Information Response 9.2.1.14A	The CPCH Parameters shall not be combined with FACH Parameters or PCH Parameters or RACH Parameters	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range bound	Explanation
MaxnoofFACHs	Maximum number of FACHs that can be defined on a
	Secondary CCPCH[FDD] / a group of Secondary
	CCPCHs [TDD].

9.1.5 COMMON TRANSPORT CHANNEL SETUP FAILURE

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	_
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	_
Cause	M	•	9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.6 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE type and 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 reconfigured	M				YES	reject
>Secondary CCPCH					_	
>>FACH parameters		0 <maxfa CHCell></maxfa 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		_	
>>>Max FACH Power	0		DL Power 9.2.1.21	Maximum allowed power on the FACH.	ı	
>>>ToAWS	0		9.2.1.61		ı	
>>>ToAWE	0		9.2.1.60		_	
>>PCH Parameters		01			YES	reject
>>>Common Transport Channel ID	M		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		-	
>>PICH Parameters		01			YES	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>PICH Power	0		9.2.1.49A		_	
>PRACH					_	
>>PRACH Parameters		0 <mexpr ACHCell></mexpr 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>Preamble Signatures	0		9.2.2.31		_	
>>>Allowed Slot Format Information		0 <maxno ofSlotForm atsPRACH ></maxno 			-	
>>>RACH Slot Format	М		9.2.2.37		-	
>>>RACH Sub Channel Numbers	0		9.2.2.38		-	
>>AICH Parameters		0 <maxpr ACHCell></maxpr 			GLOBAL	reject
>>>Common Physical Channel ID	M		9.2.1.13		_	

>>>AICH Power	0		9.2.2.D		_	
>CPCH					_	
>>CPCH Parameters		0 <maxno ofCPCHs></maxno 			GLOBAL	reject
>>>Common Transport Channel ID	М		9.2.1.14		-	
>>>UL SIR	0		9.2.1.67A		1	
>>>Initial DL transmission Power	0		DL Power 9.2.1.21		-	
>>>Maximum DL Power	0		DL Power 9.2.1.21		-	
>>>Minimum DL Power	0		DL Power 9.2.1.21		_	
>>AP-AICH Parameters		0 <maxno ofCPCHs></maxno 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		_	
>>>AP-AICH Power	0		AICH Power 9.2.2.D		1	
>>>CSICH Power	0		AICH Power 9.2.2.D	For CSICH bits at end of AP-AICH slot	-	
>>CD/CA-ICH Parameters		0 <maxno ofCPCHs></maxno 			GLOBAL	reject
>>>Common Physical Channel ID	М		9.2.1.13		-	
>>>CD/CA-ICH Power	0		AICH Power 9.2.2.D		-	

Range bound	Explanation
MaxFACHCell	Maximum number of FACHs that can be defined in a
	Cell
MaxnoofCPCHs	Maximum number of CPCHs that can be defined in a
	Cell
MaxPRACHCell	Maximum number of PRACHs and AICHe 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	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	-
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject
Secondary CCPCH parameters		0 1			YES	reject

			•	1	1	
>CCTrCH ID	M		9.2.3.3	For DL	_	
				CCTrCH		
				supporting		
				one or		
				several		
				Secondary		
				CCPCHs		
>Secondary CCPCHs		0			GLOBAL	reject
to be configured		<maxnoofs< td=""><td></td><td></td><td></td><td></td></maxnoofs<>				
		CCPCHs>				
>>Common Physical	M		9.2.1.13		_	
Channel ID						
>>SCCPCH Power	0		DL power		_	
			9.2.1.21			
PICH Parameters		0 1			YES	reject
>Common Physical	M		9.2.1.13		_	
Channel ID >PICH Power			0.04.404			
FACH parameters	0	0.14	9.2.1.49A		-	
FACE parameters		0 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxno<>			GLOBAL	reject
O a series and Transport		ofFACHs>				
>Common Transport Channel ID	М		9.2.1.14		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>Max FACH Power	0		9.2.1.60 DL Power	For	YES	noi o ot
>Wax 1 ACI 11 Gwei	O		9.2.1.21	-	153	reject
			9.2.1.21	1.28Mcps		
PCH parameters		0 1		TDD only	YES	roigot
>Common Transport	B 4	0 1	0.04.44		123	reject
Channel ID	М		9.2.1.14		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	
>PCH Power	0		DL Power	For	YES	reject
			9.2.1.21	1.28Mcps		
				TDD only		
FPACH parameters		01		Mandatory	YES	reject
				for		-
				1.28Mcps		
				TDD only		
>Common Physical	М		9.2.1.13		_	
Channel ID						
>Max FPACH Power	0		9.2.3.5E		_	

Range bound	Explanation
MaxnoofSCCPCHs	Maximum number of SCCPCH that can be repeated
	in a Cell
MaxnoofFACHs	Maximum number of FACHs that can be repeated in a
	Cell

9.1.7 COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.8 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		ı	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		ı	
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	М		9.2.1.9		YES	reject
Common Physical Channel ID	М		9.2.1.13	Indicates the Common Physical Channel for which the Common Transport Channels (together with the Common Physical Channel) shall be deleted.	YES	reject
Configuration Generation ID	М		9.2.1.16		YES	reject

9.1.10 COMMON TRANSPORT CHANNEL DELETION RESPONSE

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.11 BLOCK RESOURCE REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Blocking Priority Indicator	M		9.2.1.5		YES	reject
Shutdown Timer	C-		9.2.1.56		YES	reject
	BlockNormal					

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	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		1	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.14 UNBLOCK RESOURCE INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		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	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Start Of Audit Sequence Indicator	М		9.2.1.56B		YES	reject

9.1.17 AUDIT RESPONSE

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	-
End Of Audit Sequence Indicator	М		9.2.1.29A		YES	ignore
Cell Information		0 <maxcellin nodeb=""></maxcellin>			EACH	ignore
>C-ID	М		9.2.1.9		_	
>Configuration Generation ID	М		9.2.1.16		1	
>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		YES	ignore
>Secondary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Primary CPICH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>Secondary CPICH Information		0 <maxsc PICHCell></maxsc 	3.2.1.10/1		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 9.2.1.13A		YES	ignore

	T	T	T	1		
>Secondary CCPCH		0 <maxsc< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxsc<>			EACH	ignore
Information		CPCHCell				
		>				
>>Secondary CCPCH	M		Common		_	
Individual Information			Physical			
			Channel			
			Status			
			Information			
>PCH Information			9.2.1.13A Common		\/=0	
>PCH IIIIOIIIIalioii	0		Transport		YES	ignore
			Channel			
			Status			
			Information			
			9.2.1.14B			
>PICH Information	0		Common		YES	ignore
			Physical			9
			Channel			
			Status			
			Information			
. FACILIM6			9.2.1.13A			
>FACH Information		0 <maxfa< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxfa<>			EACH	ignore
		CHCell>				
>>FACH Individual	M		Common		_	
Information			Transport			
			Channel			
			Status			
			Information			
			9.2.1.14B			
>PRACH Information		0 <maxpr< td=""><td>0.2</td><td></td><td>EACH</td><td>ignore</td></maxpr<>	0.2		EACH	ignore
		ACHCell>			27(011	1911010
>>PRACH Individual	М	7101100112	Common		_	
Information	IVI		Physical		_	
			Channel			
			Status			
			Information			
			9.2.1.13A			
>RACH Information		0 <maxra< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxra<>			EACH	ignore
		CHCell>				
>>RACH Individual	M		Common		_	
Information			Transport			
			Channel			
			Status			
			Information			
			9.2.1.14B			
>AICH Information	1	0 <maxpr< td=""><td>5.2</td><td></td><td>EACH</td><td>ignore</td></maxpr<>	5.2		EACH	ignore
		ACHCell>				1911010
>>AICH Individual	М	7101106112	Common		_	
Information	141				_	
			Physical			
			Channel			
			Status			
			Information			
	1	ļ	9.2.1.13A			
>PCPCH Information		0 <maxpc< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxpc<>			EACH	ignore
		PCHCell>				
>>PCPCH Individual	M		Common			
Information			Physical			
			Channel			
			Status			
			Information			
	1	1	miomation	ı		

			9.2.1.13A			
>CPCH Information		0 <maxcp CHCell></maxcp 	9.2.1.10A		EACH	ignore
>>CPCH Individual Information	М		Common Transport Channel Status Information 9.2.1.14B		-	
>AP-AICH Information		0 <maxcp CHCell></maxcp 			EACH	ignore
>>AP-AICH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>CD/CA-ICH Information		0 <maxcp CHCell></maxcp 			EACH	ignore
>>CD/CA-ICH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>SCH Information	0		Common Physical Channel Status Information 9.2.1.13A	TDD Sync Channel	YES	ignore
>FPACH Information		0 <maxfp ACHCell></maxfp 		For 1.28Mcps TDD only	EACH	ignore
>>FPACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A		-	
>DwPCH Information	0		Common Physical Channel Status Information 9.2.1.13A	For 1.28Mcps TDD only	YES	ignore
Communication Control Port Information		0 <maxccpi nNodeB></maxccpi 	-		EACH	ignore
>Communication Control Port ID	М		9.2.1.15		_	
>Resource Operational State	М		9.2.1.52		-	
>Availability Status	М		9.2.1.2		_	
Local Cell Information		0 <maxlocal CellinNode B></maxlocal 			EACH	ignore
>Local Cell ID	M		9.2.1.38		_	
· · · · · · · · · · · · · · · · · · ·	·	·		·		

	T		0.04.000	T		
>DL or Global Capacity	M		9.2.1.20B		_	
Credit						
>UL Capacity Credit	0		9.2.1.65A		1	
>Common Channels	M		9.2.1.9A		_	
Capacity Consumption						
Law						
>Dedicated Channels	М		9.2.1.20A		_	
Capacity Consumption						
Law						
>Maximum DL Power	0		9.2.1.39		-	
Capability			0.200			
>Minimum Spreading	0		9.2.1.47		-	
Factor						
>Minimum DL Power	0		9.2.1.46A		_	
Capability						
>Local Cell Group ID	0		9.2.1.37A		_	
>Reference Clock	0		9.2.3.14A	TDD only	YES	ignore
availability						
Local Cell Group		0			EACH	ignore
Information		<maxlocal< td=""><td></td><td></td><td></td><td>J</td></maxlocal<>				J
		CellinNode				
		B>				
>Local Cell Group ID	М		9.2.1.37A		_	
>DL or Global Capacity	М		9.2.1.20B		-	
Credit			0.2202			
>UL Capacity Credit	0		9.2.1.65A		_	
>Common Channels	М		9.2.1.9A		_	
Capacity Consumption						
Law						
>Dedicated Channels	M		9.2.1.20A		_	
Capacity Consumption						
Law	_	1				
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range bound	Explanation
MaxCellinNodeB	Maximum number of Cell that can be configured in Node B
MaxCCPinNodeB	Maximum number of communication control ports that can exist in the Node B
MaxCPCHCell	Maximum number of CPCHes that can be defined in a Cell
MaxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
MaxPCPCHCell	Maximum number of PCPCHes that can be defined in a Cell
MaxSCPICHCell	Maximum number of Secondary CPICH that can be defined in a Cell.
MaxSCCPCHCell	Maximum number of Secondary CCPCH that can be defined in a Cell.
MaxFACHCell	Maximum number of FACHes that can be defined in a Cell
MaxPRACHCell	Maximum number of PRACHes that can be defined in a Cell
MaxRACHCell	Maximum number of RACHes that can be defined in a Cell
MaxFPACHCell	Maximum number of FPACHes 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	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	reject
Measurement ID	M		9.2.1.42		YES	reject
Common Measurement	M		9.2.1.10		YES	reject
Object Type			9.2.1.10			_
CHOICE Common Measurement Object Type	М				YES	reject
>Cell					-	
>>C-ID	М		9.2.1.9		-	
>>Time Slot	0		9.2.3.23	For 3.84Mcps TDD only	I	
>>Time Slot LCR	0		9.2.3.24A	For 1.28Mcps TDD only	YES	reject
>>Neighbouring Cell Measurement Information		0 <maxno MeasNCell s></maxno 			GLOBAL	ignore
>>>Neighbouring FDD Cell Measurement Information	0		9.2.1.47C		-	-
>>>Neighbouring TDD Cell Measurement Information	0		9.2.1.47D		-	_
>RACH				FDD only	_	
>>C-ID	М		9.2.1.9	,	_	
>>Common Transport Channel ID	М		9.2.1.14		_	
>CPCH				FDD only	_	
>>C-ID	М		9.2.1.9	ĺ	_	
>>Common Transport Channel ID	М		9.2.1.14		_	
>>Spreading Factor	0		Minimum UL Channelisa tion Code Length 9.2.2.22		ı	
Common Measurement Type	М		9.2.1.11		YES	reject
Measurement Filter Coefficient	0		9.2.1.41		YES	reject
Report Characteristics	М		9.2.1.51		YES	reject
SFN reporting indicator	М		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

Range bound	Explanation
maxnoMeasNCells	Maximum number of neighbouring cells that can be
	measured on.

9.1.19 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	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
CHOICE Common Measurement Object Type	0			Common Measuremen t Object Type that the measuremen t was initiated with.	YES	ignore
>Cell					YES	
>>Common Measurement value	М		9.2.1.12		1	
>RACH				FDD only	1	
>>Common Measurement Value	М		9.2.1.12		1	
>CPCH				FDD only	_	
>>Common Measurement Value	М		9.2.1.12		_	
SFN	0		9.2.1.53A	Common Measuremen t Time Reference	YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore
Common Measurement Achieved Accuracy	0		Common Measurem ent Accuracy 9.2.1.9B		YES	ignore

9.1.20 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Discriminator	М		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	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		1	
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 Measuremen t Object Type that the measuremen t was initiated with.	YES	ignore
>Cell					_	
>>Common Measurement Value Information	M		9.2.1.12A		-	
>RACH				FDD only	_	
>>Common Measurement Value Information	M		9.2.1.12A		-	
>CPCH				FDD only	_	
>>Common Measurement Value Information	M		9.2.1.12A			
SFN	0		9.2.1.53A	Common Measuremen t Time Reference	YES	ignore

9.1.22 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore

9.1.23 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Measurement ID	М		9.2.1.42		YES	ignore
Cause	М		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	М		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	М		9.2.2.34	YES	reject
Synchronisation		1		YES	reject
Configuration					.,
>N INSYNC IND	М		9.2.1.47A	_	
>N OUTSYNC IND	M		9.2.1.47B	_	
>T RLFAILURE	M		9.2.1.56A	_	
DL TPC pattern 01 count	M		9.2.2.13A	YES	reject
Primary SCH Information		1		YES	reject
>Common Physical	М		9.2.1.13	_	
Channel ID					
>Primary SCH Power	M		DL Power	_	
.,			9.2.1.21		
>TSTD Indicator	M		9.2.1.64	_	
Secondary SCH		1		YES	reject
Information					-,
>Common Physical	М		9.2.1.13	_	
Channel ID					
>Secondary SCH power	М		DL Power	_	
			9.2.1.21		
>TSTD Indicator	М		9.2.1.64	_	
Primary CPICH		1		YES	reject
Information					,
>Common Physical Channel ID	М		9.2.1.13	_	
>Primary CPICH power	М		9.2.2.33	_	
>Transmit Diversity	M		9.2.2.53	_	
Indicator	IVI		0.2.2.00		
Secondary CPICH Information		0 <maxsc PICHCell></maxsc 		EACH	reject
>Common Physical	М	7 707 700112	9.2.1.13	_	
Channel ID	101		0.2.1.10		
>DL Scrambling code	М		9.2.2.13	_	
>FDD DL Channelisation	M		9.2.2.14	_	
Code Number	IVI		3.2.2.14		
>Secondary CPICH Power	М		DL Power	_	
2 Goodingary of Forth Silver			9.2.1.21		
>Transmit Diversity	М		9.2.2.53	_	
Indicator					
Primary CCPCH		1		YES	reject
Information		_			,
>Common Physical Channel ID	М		9.2.1.13	_	
>BCH Information		1		_	
>>Common Transport	М	· · · · · · · · · · · · · · · · · · ·	9.2.1.14	_	
Channel ID	.**		0.2.1.1		
>>BCH Power	М		DL Power	_	
-			9.2.1.21		
>STTD Indicator	M		9.2.2.48	_	
Limited power increase		1		YES	reject
information					-
				1	
>Power_Raise_Limit	М		9.2.2.29A	_	
	M M		9.2.2.29A 9.2.2.12A		
>Power_Raise_Limit >DL_power_averaging_wi ndow_size					
>Power_Raise_Limit >DL_power_averaging_wi		01		- - YES	reject
>Power_Raise_Limit >DL_power_averaging_wi ndow_size		01		_	reject
>Power_Raise_Limit >DL_power_averaging_wi ndow_size IPDL Parameter		01		_	reject
>Power_Raise_Limit >DL_power_averaging_wi ndow_size IPDL Parameter Information	M	01	9.2.2.12A	- YES	reject

Range bound	Explanation
MaxSCPICHCell	Maximum number of Secondary CPICH that can be
	defined 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	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	,
Local Cell ID	М		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	М		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15]	YES	reject
Cell Parameter ID	M		9.2.3.4		YES	reject
Maximum Transmission Power	M		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26	On DCHs	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	М		9.2.1.47B		_	
>T_RLFAILURE	М		9.2.1.56A		_	
DPCH Constant Value	М		Constant Value		YES	reject
PUSCH Constant Value	М		Constant Value		YES	reject
PRACH Constant Value	М		Constant Value		YES	reject
Timing Advance Applied	М		9.2.3.22A		YES	reject
SCH Information		01		Mandatory For 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>CHOICE Sync Case	M				YES	reject
>>Case 1					_	
>>>Time Slot	M		9.2.3.23		_	
>>Case 2					_	
>>>SCH Time Slot	M		9.2.3.17		_	
>SCH Power	M		DL Power 9.2.1.21		_	
>TSTD Indicator	M		9.2.1.64		_	
PCCPCH Information		01		Mandatory For 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		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		-	
>Block STTD Indicator	M		9.2.3.1	ļ	_	
Time Slot Configuration		0 15		Mandatory For 3.84Mcps TDD only	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		_	

Time Slot Configuration LCR		07		Mandatory For 1.28Mcps TDD only	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		_	
>Time Slot Status	M		9.2.3.25		_	
>Time Slot Direction	M		9.2.3.24		_	
PCCPCH Information LCR		01		Mandatory For 1.28Mcps TDD only	YES	reject
>Common physical channel ID	М		9.2.1.13		_	
>Time Slot LCR	M		9.2.3.24A		_	
>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		_	
>Block STTD Indicator	M		9.2.3.1		_	
>TSTD Indicator	M		9.2.1.64		_	
DwPCH Information		01		Mandatory For 1.28Mcps TDD only	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>TSTD Indicator	M		9.2.1.64		_	
>SYNC_DL Code ID	M		9.2.3.18B		_	
>DwPCH Power	M		9.2.3.5B		_	
Reference SFN offset	0		9.2.3.14B		YES	ignore
IPDL Parameter Information		01			YES	reject
>IPDL TDD Parameters	М		9.2.3.5D		_	
>IPDL Indicator	М		9.2.1.36F		_	

9.1.25 CELL SETUP RESPONSE

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.26 CELL SETUP FAILURE

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.27 CELL RECONFIGURATION REQUEST

9.1.27.1 FDD Message

IE/Group Name	Presence	Range	IE type	Semantics	Criticality	Assigned
			and reference	description		Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62			TOJOOL
C-ID	M		9.2.1.02		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
Maximum Transmission	O		9.2.1.40		YES	reject
Power			3.2.1.40		120	10,000
Synchronisation		0,1			YES	reject
Configuration						-
>N_INSYNC_IND	M		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A		_	
Primary SCH Information		0,1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		_	
>Primary SCH power	М		DL Power 9.2.1.21		_	
Secondary SCH Information		0,1			YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>Secondary SCH power	М		DL Power 9.2.1.21		_	
Primary CPICH		0,1			YES	reject
Information						
>Common Physical Channel ID	M		9.2.1.13		_	
>Primary CPICH power	M		9.2.2.33		_	
Secondary CPICH		0 <maxsc< td=""><td></td><td></td><td>YES</td><td>reject</td></maxsc<>			YES	reject
Information		PICHCell>				
>Common Physical Channel ID	M		9.2.1.13		_	
>Secondary CPICH Power	M		DL Power 9.2.1.21		_	
Primary CCPCH Information		0,1			YES	reject
>BCH Information		1			_	
>>Common Transport Channel ID	М		9.2.1.14		_	
>>BCH Power	М		DL Power 9.2.1.21		_	
IPDL Parameter Information		01			YES	reject
>IPDL FDD Parameters	0		9.2.2.18C		_	
>IPDL Indicator	М		9.2.1.36F		_	

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	Semantics description	Criticality	Assigned Criticality
			reference			
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
Configuration Generation ID	М		9.2.1.16		YES	reject
Synchronisation Configuration		0,1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		_	
>N_OUTSYNC_IND	M		9.2.1.47B		_	
>T_RLFAILURE	M		9.2.1.56A		_	
Timing Advance Applied	0		9.2.3.22A	For 3.84Mcps TDD only	YES	reject
SCH Information		0,1		For 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>SCH Power	М		DL Power 9.2.1.21		-	
PCCPCH Information		0,1			YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>PCCPCH Power	M		9.2.3.9		_	
Maximum Transmission Power	0		9.2.1.40		YES	reject
DPCH Constant Value	0		Constant Value		YES	reject
PUSCH Constant Value	0		Constant Value		YES	reject
PRACH Constant Value	0		Constant Value		YES	reject
Time Slot Configuration		015		Mandatory For 3.84Mcps TDD only	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		_	_
Time Slot Configuration LCR		0 7		Mandatory For 1.28Mcps TDD only	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		_	
DwPCH Information		0 1		Mandatory For 1.28Mcps TDD only	YES	reject
>Common Physical Channel ID	М		9.2.1.13		_	
>DwPCH Power	M		9.2.3.5B			
IPDL Parameter Information		01			YES	reject
>IPDL TDD Parameters	0		9.2.3.5D		_	
>IPDL Indicator	M		9.2.1.36F		_	

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	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.29 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	М		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.30 CELL DELETION REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	М		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	М		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	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Indication Type	M		9.2.1.36		YES	ignore
CHOICE Indication Type	M				YES	ignore
>No Failure					_	
>>Local Cell Information		1 <max LocalCellin NodeB ></max 			EACH	ignore
>>>Local Cell ID	M		9.2.1.38		_	
>>>Add/Delete	M		9.2.1.1		_	
Indicator						
>>>DL or Global Capacity Credit	C-add		9.2.1.20B		_	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	C-add		9.2.1.9A		_	
>>>Dedicated Channels Capacity Consumption Law	C-add		9.2.1.20A		_	
>>>Maximum DL Power Capability	C-add		9.2.1.39		_	
>>>Minimum Spreading Factor	C-add		9.2.1.47		_	
>>>Minimum DL Power Capability	C-add		9.2.1.46A		_	
>>>Reference Clock availability	C-add		9.2.3.14A	TDD only	YES	ignore
>>>Local Cell Group ID	0		9.2.1.37A		_	
>>Local Cell Group Information		0 <maxlocal CellinNode B></maxlocal 			EACH	ignore
>>>Local Cell Group ID	М		9.2.1.37A		_	
>>>DL or Global Capacity Credit	М		9.2.1.20B		_	
>>>UL Capacity Credit	0		9.2.1.65A		_	
>>>Common Channels Capacity Consumption Law	М		9.2.1.9A		_	
>>>Dedicated Channels Capacity Consumption Law	M		9.2.1.20A		-	
>Service Impacting					-	
>>Local Cell Information		0 <maxlocal CellinNode B></maxlocal 			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		9.2.2.3		_	
>>>Dedicated Channels Capacity Consumption Law	0		9.2.2.6		_	
>>>Maximum DL Power Capability	0		9.2.1.39		_	
>>>Minimum Spreading Factor	0		9.2.1.47		-	
>>>Minimum DL Power Capability	0		9.2.1.46A		_	
>>>Reference Clock availability	0		9.2.3.14A	TDD only	YES	ignore
>>Local Cell Group Information		0 <maxlocal CellinNode B></maxlocal 			EACH	ignore
>>>Local Cell Group ID	М		9.2.1.37A		_	
>>>DL or Global Capacity Credit	0		9.2.2.12		1	
>>>UL Capacity Credit	0		9.2.2.60		_	·
>>>Common Channels Capacity Consumption Law	0		9.2.2.3		_	
>>>Dedicated Channels Capacity Consumption Law	0		9.2.2.6		_	
>>Communication Control Port Information		0 <maxccpi nNodeB></maxccpi 			EACH	ignore
>>>Communication Control Port ID	M		9.2.1.15		_	
>>>Resource Operational State	М		9.2.1.52		_	
>>>Availability Status	M		9.2.1.2		_	
>>Cell Information		0 <maxcellin NodeB></maxcellin 			EACH	ignore
>>>C-ID	M		9.2.1.9		_	
>>>Resource Operational State	0		9.2.1.52		_	
>>>Availability Status	0		9.2.1.2		_	
>>>Primary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>Secondary SCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>Primary CPICH Information	0		Common Physical Channel Status Information		YES	ignore

		0 00	9.2.1.13A	EAGU	
>>>Secondary CPICH Information		0 <maxsc PICHCell></maxsc 		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 <maxsc CPCHCell ></maxsc 		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 <maxfac HCell></maxfac 		EACH	ignore
>>>FACH Individual Information	М		Common Transport Channel Status Information 9.2.1.14B	-	
>>>PRACH Information		0 <maxpr ACHCell></maxpr 		EACH	ignore
>>>PRACH Individual Information	M		Common Physical Channel Status Information 9.2.1.13A	-	
>>>RACH Information		0 <maxpra CHCell></maxpra 		EACH	ignore
>>>RACH Individual Information	М		Common Transport Channel Status Information	-	

			9.2.1.14B			
>>>AICH Information		0 <maxpra CHCell></maxpra 	0.2		EACH	ignore
>>>>AICH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>PCPCH Information		0 <maxpc PCHCell></maxpc 			EACH	ignore
>>>>PCPCH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>CPCH Information		0 <maxcpc HCell></maxcpc 			EACH	ignore
>>>>CPCH Individual Information	М		Common Transport Channel Status Information 9.2.1.14B		-	
>>>AP-AICH Information		0 <maxcpc HCell></maxcpc 			EACH	ignore
>>>AP-AICH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>CD/CA-ICH Information		0 <maxcpc HCell></maxcpc 			EACH	ignore
>>>>CD/CA-ICH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>SCH Information	0		Common Physical Channel Status Information 9.2.1.13A		YES	ignore
>>>FPACH Information		0 <maxfpa CHCell></maxfpa 		For 1.28Mcps TDD only	EACH	ignore
>>>>FPACH Individual Information	М		Common Physical Channel Status Information 9.2.1.13A		-	
>>>DwPCH Information	0		Common Physical Channel Status Information 9.2.1.13A	For 1.28Mcps TDD only	YES	ignore
Cause	0		9.2.1.6		YES	ignore

Condition	Explanation
add	The IE shall be present if the Add/Delete Indicator IE is set to
	"Add".

Range bound	Explanation
MaxLocalCellinNodeB	Maximum number of Local Cells that can exist in the
	Node B
MaxCellinNodeB	Maximum number of C ID that can be configured in
	Node B
MaxCPCHCell	Maximum number of CPCHes that can be defined in a
	Cell
MaxSCPICHCell	Maximum number of Secondary CPICH that can be
	defined in a Cell.
MaxSCCPCHCell	Maximum number of Secondary CCPCH that can be
	defined in a Cell.
MaxFACHCell	Maximum number of FACHes that can be defined in a
	Cell
MaxPCPCHCell	Maximum number of PCPCHes that can be defined in
	a Cell
MaxPRACHCell	Maximum number of PRACHes and AICHes that can
	be defined in a Cell
MaxCCPinNodeB	Maximum number of communication control ports that
	can exist in the Node B
MaxFPACHCell	Maximum number of FPACHes 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	M		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	

C-ID	M		9.2.1.9		YES	reject
BCCH Modification Time	0		9.2.1.3		YES	reject
MIB/SB/SIBInformation		1 maxIB			GLOBAL	reject
>IB Type	M		9.2.1.35		_	
>IB OC ID	M		9.2.1.31A	In one message, every occurrence of IB Type can only be deleted once and/or added once.	_	
>CHOICE IB	M				_	
DeletionIndicator						
>>NoDeletion					_	
>>>SIB Originator	C-SIB		9.2.1.55		_	
>>>IB SG REP	0		9.2.1.34		_	
>>>Segment Information		1 maxIBSEG			GLOBAL	reject
>>>IB SG POS	0		9.2.1.33		_	
>>>Segment type	C – CRNCOrigi nation		9.2.1.53B		-	
>>>IB SG DATA	C – CRNCOrigi nation		9.2.1.32		-	
>>Deletion			NULL		_	

Range bound	Explanation
1maxIB	Maximum number of information Blocks supported in
	one message.
1maxIBSEG	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	Th 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
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		_	
UL DPCH Information		1			YES	reject
>UL Scrambling Code	М		9.2.2.59		_	
>Min UL Channelisation Code length	М		9.2.2.22		_	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.21		_	
>puncture Limit	М		9.2.1.50	For UL	_	
>TFCS	М		9.2.1.58	for UL	_	
>UL DPCCH Slot Format	M		9.2.2.57		_	
> UL SIR Target	М		UL SIR 9.2.1.67A		_	
>Diversity mode	M		9.2.2.9		_	
>SSDT cell ID Length	0		9.2.2.45		_	
>S Field Length	C-FBI		9.2.2.40		_	
>DPC mode	0		9.2.2.13C		YES	reject
DL DPCH Information		1			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	М		9.2.2.23		_	
>PDSCH RL ID	C-DSCH		RL ID 9.2.1.53		_	
>PDSCH code mapping	C-DSCH		9.2.2.25		_	
>Power Offset		1			_	
Information			_			
>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	_	
>>PO2	М		Power Offset 9.2.2.29	Power offset for the TPC bits	-	
>>PO3	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
DSCH Information	0		DSCH FDD Information 9.2.2.13B		YES	reject

TFCI2 bearer information		01			YES	ignore
>ToAWS	M		9.2.1.61		-	
>ToAWE	M		9.2.1.60		-	
RL Information		1 to <maxnoof RLs></maxnoof 			EACH	notify
>RL ID	M		9.2.1.53		_	
>C-ID	М		9.2.1.9		_	
>First RLS Indicator	M		9.2.2.16A		_	
>Frame Offset	M		9.2.1.31		_	
>Chip Offset	М		9.2.2.2		_	
>Propagation Delay	0		9.2.2.35		_	
>Diversity Control Field	C – NotFirstRL		9.2.1.25		_	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		-	
>Initial DL transmission Power	М		DL Power 9.2.1.21	Initial power on DPCH	_	
>Maximum DL power	М		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>SSDT Cell Identity	0		9.2.2.44		_	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.53		_	
>SSDT Cell Identity for EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
Transmission Gap Pattern Sequence Information	0		9.2.2.53A		YES	reject
Active Pattern Sequence Information	0		9.2.2.A		YES	reject
DSCH Common Information	0		DSCH FDD Common Information 9.2.2.13D		YES	ignore

Condition	Explanation
CodeLen	The IE shall be present if Min UL Channelisation Code Length IE
	equals to 4.
FBI	The IE shall be present if the UL DPCCH Slot Format IE indicates
	a slot format with 1 or 2 FBI bits (see ref.[7]).
NotFirstRL	The IE shall be present if the RL is not the first one in the RL
	Information IE.
DSCH	The IE shall be present if the DSCH Information IE is present.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to
	any of the values from 12 to 16.
Diversity mode	The IE shall be present if Diversity Mode IE in UL DPCH
	Information IE is not set to "none".
EDSCHPC	The IE shall be present if Enhanced DSCH PC IE is present in
	the DSCH Common Information IE.

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.

9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	reject
Transaction ID	М		9.2.1.62		_	
UL CCTrCH Information		0 to <maxno CCTrCH></maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	M		9.2.3.22		_	
>Puncture Limit	М		9.2.1.50			
> UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		01		For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		1	
>>Repetition Length	M		9.2.3.15		1	
>>TDD DPCH Offset	M		9.2.3.19A		ı	
>>UL Timeslot Information	M		9.2.3.26C		_	
>UL DPCH Information LCR		01		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		ı	
>>Repetition Length	M		9.2.3.15		1	
>>TDD DPCH Offset	M		9.2.3.19A		ı	
>>UL Timeslot Information LCR	M		9.2.3.26E		_	
DL CCTrCH Information		0 to <maxno CCTrCH></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	М		9.2.1.58		_	
>TFCI Coding	М		9.2.3.22		_	
>Puncture Limit	М		9.2.1.50		_	
>TDD TPC DL Step Size	М		9.2.3.21			
>TPC CCTrCH List		0 to <maxnoc CTrCH></maxnoc 		List of uplink CCTrCH which provide TPC	_	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.3		-	
>DL DPCH information		01		For 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		_	
>>DL Timeslot	М		9.2.3.4E		_	
Information						
>DL DPCH information LCR		01		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16	J	_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot Information LCR	М		9.2.3.40		_	
>>TSTD Indicator	М		9.2.1.64		_	
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	Initial power on DPCH	_	
>Maximum DL power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>DL Time Slot ISCP Info	0		9.2.3.4F	For 3.84Mcps TDD only	-	
>DL Time Slot ISCP Info LCR	0		9.2.3.40A	For 1.28Mcps TDD only	YES	reject

Range bound	Explanation
MaxnoCCTrCH	Number of CCTrCH for one UE.

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	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	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
Communication Control Port ID	М		9.2.1.15		YES	ignore
RL Information Response		1 to <maxnoofrl s></maxnoofrl 			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		_	
>Diversity Indication	C- NotFirstRL		9.2.1.26		_	
>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		-	
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>SSDT Support Indicator	M		9.2.2.46		_	
TFCI2 Bearer Information Response	0		9.2.2.49A		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Condition	Explanation
NotFirstRL	The IE shall be present if the RL is not the first one in the RL
	Information Response IE.

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.

9.1.37.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	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
Communication Control Port ID	М		9.2.1.15		YES	ignore
RL Information Response		01		Mandatory For 3.84Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info	M		9.2.3.26D		_	
>UL PhysCH SF Variation	M		9.2.3.26B		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.28		YES	ignore
RL Information Response LCR		0 1		Mandatory For 1.28Mcps TDD only	YES	ignore
>RL ID	M		9.2.1.53		_	
>UL Time Slot ISCP Info LCR	М		9.2.3.26F		_	
>UL PhysCH SF Variation	М		9.2.3.26B		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.28		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.38 RADIO LINK SETUP FAILURE

9.1.38.1 FDD Message

Message Type CRNC Communication Context ID Transaction ID Node B Communication Context ID Communication Control Port ID CHOICE cause level >General >>Cause >RL specific	M M M		9.2.1.45			Criticality
CRNC Communication Context ID Transaction ID Node B Communication Context ID Communication Control Port ID CHOICE cause level >General >>Cause >RL specific			J.∠.1.40		_	
CRNC Communication Context ID Transaction ID Node B Communication Context ID Communication Control Port ID CHOICE cause level >General >>Cause >RL specific	M		9.2.1.46		YES	reject
Node B Communication Context ID Communication Control Port ID CHOICE cause level >General >>Cause >RL specific			9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Context ID Communication Control Port ID CHOICE cause level >General >>Cause >RL specific	M		9.2.1.62		ı	
ID CHOICE cause level >General >>Cause >RL specific	C-Success		9.2.1.48	The reserved value "All NBCC" shall not be used	YES	ignore
>General >>Cause >RL specific	0		9.2.1.15		YES	ignore
>>Cause >RL specific	M				YES	ignore
>RL specific						
·	M		9.2.1.6		-	
					ı	
>>Unsuccessful RL Information Response		1 to <maxnoo fRLs></maxnoo 			EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>Cause	M		9.2.1.6		_	
>>Successful RL Information Response		0 to <maxnoo fRLs-1></maxnoo 			EACH	ignore
>>>RL ID	M		9.2.1.53		-	
7 7 7 112 001 12	M		9.2.2.39			
band power	М		9.2.2.39A		1	
222Bivoroity maioation	C-NotFirstRL		9.2.1.26		-	
>>>CHOICE diversity Indication	М				_	
>>>Combining					_	
>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	ı	
>>>Non Combining or First RL					-	
>>>>DCH Information Response	М		9.2.1.20C		-	
	0		9.2.1.27A		YES	ignore
	0		9.2.2.49A		-	
	M		9.2.2.46		_	
	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.
NotFirstRL	The IE shall be present if the RL is not the first one in the
	Successful RL Information Response IE.

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.

9.1.38.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
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

9.1.39 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	M		9.2.1.46		YES	reject
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		_	
Compressed Mode Deactivation Flag	0		9.2.2.3A		YES	reject
RL Information		1 <ma xnoofR L-1></ma 			EACH	notify
>RL ID	M		9.2.1.53		_	
>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		-	
>Initial DL transmission power	0		DL Power 9.2.1.21	Initial power on DPCH	_	
>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	-	
>SSDT Cell Identity	0		9.2.2.44			
>Transmit Diversity Indicator	0		9.2.2.53		_	

Range bound	Explanation				
MaxnoofRL	Maximum number of RLs for one UE				
MaxnoofDLCodes	Maximum number of DL code information				

9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	М		9.2.1.62		_	
UL CCTrCH Information		0 to <maxn o CCTrC H></maxn 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>UL DPCH Information		01		For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD DPCH Offset	М		9.2.3.19A		_	
>>UL Timeslot Information	M		9.2.3.26C		_	
>UL DPCH Information LCR		01		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information LCR	М		9.2.3.26E		_	
DL CCTrCH Information		0 to <maxn o CCTrC H></maxn 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>DL DPCH information		01		For 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		·	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>DL Timeslot Information	M		9.2.3.4E		-	
>DL DPCH information LCR		01		For 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15			
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>DL Timeslot Information LCR	М		9.2.3.40		_	
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		_	
>Diversity Control Field >Initial DL transmission Power	M O		9.2.1.25 DL Power	Initial power	-	
>Maximum DL power	0		9.2.1.21 DL Power	on DPCH Maximum	_	

		9.2.1.21	allowed power on DPCH		
>Minimum DL power	0	DL Power 9.2.1.21	Minimum allowed power on DPCH	_	
>DL Time Slot ISCP Info	0	9.2.3.4F	For 3.84Mcps TDD only	_	
>DL Time Slot ISCP Info LCR	0	9.2.3.40A	For 1.28Mcps TDD only	YES	reject

Range bound	Explanation	
MaxnoCCTrCH	Number of CCTrCH for one UE.	

9.1.40 RADIO LINK ADDITION RESPONSE

9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62	be asea.	_	
RL Information Response		1 <maxno ofRL-1></maxno 			EACH	ignore
>RL ID	М		9.2.1.53		_	
>RL Set ID	М		9.2.2.9		_	
> Received total wide band power	М		9.2.2.39A		-	
>Diversity Indication	М		9.2.1.26		_	
>CHOICE diversity indication	М				_	
>>Combining					_	
>>>RL ID	М		9.2.1.53	Reference RL	_	
>>Non combining					_	
>>>DCH Information Response	М		9.2.1.20C		_	
>SSDT support indicator	М		9.2.2.46		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range bound	Explanation			
MaxnoofRL	Maximum number of RLs for one UE			

9.1.40.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		_	
RL Information response		1			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			_	
>>Diversity Indication	M		9.2.1.26		_	
>>CHOICE diversity indication	M				_	
>>>Combining				In TDD it indicates whether the old Transport Bearer shall be reused or not	-	
>>>>RL ID	М		9.2.1.53	Reference RL	_	
>>>Non combining					_	
>>>DCH Information Response	M		9.2.1.20C		_	
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.29		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.41 RADIO LINK ADDITION FAILURE

9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
CHOICE cause level	М				YES	Ignore
>General					_	
>>Cause	М		9.2.1.6		_	
>RL specific					_	
>>Unsuccessful RL Information Response		1 <ma xnoofR L-1></ma 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
>>Succcessful RL Information Response		0 <ma xnoofR L-2></ma 			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		_	
>>>Diversity Indication	М		9.2.1.26		_	
>>>CHOICE diversity indication	М				_	
>>>Combining					_	
>>>>RL ID	М		9.2.1.53	Reference RL	_	
>>>Non combining					_	
>>>>DCH Information Response	M		9.2.1.20C		_	
>>>SSDT support indicator	М		9.2.2.46		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range bound	Explanation			
MaxnoofRL	Maximum number of RLs for one UE			

9.1.41.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
CHOICE cause level	M				YES	Ignore
>General					_	
>>Cause	M		9.2.1.6		_	
>RL specific					_	
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	М		9.2.1.53		_	
>>>Cause	М		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		_	
UL DPCH Information		01			YES	reject
>UL Scrambling code	0		9.2.2.59		_	
>UL SIR Target	0		UL SIR 9.2.1.67A		_	
>Min UL Channelistion Code Length	0		9.2.2.22		_	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.20		_	
>Puncture Limit	0		9.2.1.50	For UL	_	
>TFCS	0		9.2.1.58			
>UL DPCCH Slot Format	0		9.2.2.57		_	
>Diversity mode	0		9.2.2.9		_	
>SSDT Cell Identity Length	0		9.2.2.45		_	
>S-Field Length	0		9.2.2.40		_	
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58		_	
>DL DPCH Slot Format	0		9.2.2.10		_	
>TFCI Signalling Mode	0		9.2.2.50		_	
>TFCI presence	C-Slot Format		9.2.1.57		_	
>Multiplexing Position	0		9.2.2.23		_	
>PDSCH code mapping	0		9.2.2.25		_	
>PDSCH RL ID	0		RL ID 9.2.1.53		_	
>Limited Power Increase	0		9.2.2.18A		_	
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 <max noofDC Hs></max 			GLOBAL	reject
>DCH ID	M		9.2.1.20			
DSCH to modify		0 <max noofDS CHs></max 			YES	reject
>DSCH ID	M		9.2.1.27		_	
>Transport Format Set	0		9.2.1.59	For the DL.	_	
>Allocation/Retention Priority	0		9.2.1.1A		_	
>Frame Handling Priority	0		9.2.1.30		_	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	

>Transport Bearer Request Indicator	М		9.2.1.62A		_	
DSCH to add	0		DSCH FDD Information 9.2.2.13B		YES	reject
DSCH to Delete		0 <max noofDS CHs></max 			YES	reject
>DSCH ID	М		9.2.1.27		_	
TFCI2 bearer specific information		01			YES	reject
>CHOICE TFCl2 bearer action	M				_	
>>Add or modify					_	
>>>ToAWS	М		9.2.1.61		_	
>>>ToAWE	М		9.2.1.60		_	
>>Delete			NULL		_	
RL Information		0 <max noofRLs ></max 			EACH	reject
>RL ID	М		9.2.1.53		_	
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		_	
>Maximum DL Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	_	
>Minimum DL Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	_	
>SSDT Indication	0		9.2.2.47		_	
>SSDT Cell Identity	C- SSDTIndON		9.2.2.44		-	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.53		_	
>SSDT Cell Identity for EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
Transmission Gap Pattern Sequence Information	0		9.2.2.53A		YES	reject
DSCH Common Information	0		DSCH FDD Common Information 9.2.2.13D		YES	ignore

Condition	Explanation
SSDTIndON	The IE shall be present if the SSDT Indication IE is
	set to "SSDT Active in the UE".
CodeLen	The IE shall be present if the Min UL Channelisation
	Code Length IE is equals to 4.
SlotFormat	The IE shall be present if the DL DPCH Slot Format
	IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE is present
	in the UL DPCH Information IEand is not set to
	"none".
EDSCHPC	The IE shall be present if Enhanced DSCH PC IE is
	present in the DSCH Common Information IE.

Range Bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofDSCHs	Maximum number of DSCHs for a UE.
MaxnoofRLs	Maximum number of RLs for a UE.

9.1.42.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		_	
UL CCTrCH to Add		0 <maxno cctrc="" hs="" of=""></maxno>			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	М		9.2.1.58		_	
>TFCI Coding	M		9.2.3.22		_	
>Puncture Limit	M		9.2.1.50			
> UL SIR Target	0		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD; not applicable for 3.84Mcps TDD	YES	reject
>UL DPCH Information		01		For 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 Information	M		9.2.3.26C		_	
>UL DPCH Information LCR		01		For 1.28Mcps 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 Information LCR	M		9.2.3.26E		_	
UL CCTrCH to Modify		0 <maxno of CCTrC Hs></maxno 			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>TFCI Coding	0		9.2.3.22		_	
>Puncture Limit	0		9.2.1.50		_	
> UL SIR Target	0		UL SIR 9.2.1.67A	For 1.28Mcps TDD only	YES	reject
>UL DPCH to add		01		For 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 Information	M		9.2.3.26C		_	

>UL DPCH to modify		01			YES	reject
>>Repetition Period	0	01	9.2.3.16		-	reject
>>Repetition Length	0		9.2.3.15		_	
>>TDD DPCH Offset	0		9.2.3.19A		_	
>>UL Timeslot Information		0 to <maxno ofULts></maxno 		For 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		_	
>>>UL Code Information		0 to <maxno OfDPC H></maxno 			_	
>>>DPCH ID	M		9.2.3.5		_	
>>>TDD Channelisation Code	0		9.2.3.19		_	
>>UL Timeslot Information LCR		0 to <maxno ofULtsL CR></maxno 		For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble shift LCR	0		9.2.3.7A			
>>>TFCI Presence	0		9.2.1.57		_	
>>>UL Code Information LCR		0 to <maxno OfDPC HLCR></maxno 			_	
>>>DPCH ID	M		9.2.3.5		_	
>>>>TDD Channelisation Code LCR	0		9.2.3.19a		-	
>UL DPCH to delete		0 <maxno of DPCHs</maxno 			GLOBAL	reject
>>DPCH ID	М		9.2.3.5		_	
>UL DPCH to add LCR		01		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		_	
>>UL Timeslot Information LCR	М		9.2.3.26E		_	
UL CCTrCH to Delete		0 <maxno of CCTrC Hs></maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3			
DL CCTrCH to Add		O <maxno of CCTrC Hs></maxno 			GLOBAL	reject
>CCTrCH ID	М		9.2.3.3		_	
>TFCS	M		9.2.1.58		_	
>TFCI Coding	M		9.2.3.22		_	
>PunctureLimit	M		9.2.1.50		_	

	1	101	1	T		
>TPC CCTrCH List		0 to		List of uplink	-	
		<maxno< td=""><td></td><td>CCTrCH</td><td></td><td></td></maxno<>		CCTrCH		
		CCTrC		which		
		Hs>	007.011	provide TPC		
>>TPC CCTrCH ID	M		CCTrCH		_	
			ID 9.2.3.3			
		0.4	9.2.3.3	Гот	VEC	unio na
>DL DPCH Information		01		For	YES	reject
				3.84Mcps		
5 111 5 1 1	M		9.2.3.16	TDD only		
>>Repetition Period		ļ			_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD DPCH Offset	M		9.2.3.19A		1	
>>DL Timeslot Information	M		9.2.3.4E		-	
>DL DPCH Information LCR		01		For	YES	reject
PDE DI GITIMOIMAMON EGR				1.28Mcps		,
				TDD only		
>>Repetition Period	М		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
,	M		9.2.3.19A	1		
>>TDD DPCH Offset				1	_	
>>DL Timeslot Information	M		9.2.3.40		_	
LCR						
DL CCTrCH to Modify		0			GLOBAL	reject
		<maxno< td=""><td></td><td></td><td></td><td></td></maxno<>				
		of				
		CCTrC				
		Hs>				
>CCTrCH ID	M		9.2.3.3.		_	
>TFCS	0		9.2.1.58		_	
>TFCI Coding	0		9.2.3.22		_	
	0		9.2.1.50		_	
>PunctureLimit	0	0 to	3.2.1.30	list of unlink	_	
>TPC CCTrCH List				List of uplink CCTrCH	_	
		<maxno CCTrC</maxno 		which		
		Hs>		provide TPC		
TDC COT-CLUD	M	1152	CCTrCH	provide TFC		
>>TPC CCTrCH ID	IVI		ID		_	
			9.2.3.3			
			3.2.0.0	+	YES	
DI DDCII4e edd		0.1		I ⊢∩r		raiact
>DL DPCH to add		01		For	120	reject
>DL DPCH to add		01		3.84Mcps	120	reject
	M	01	92316			reject
>>Repetition Period	M	01	9.2.3.16	3.84Mcps	_	reject
>>Repetition Period >>Repetition Length	М	01	9.2.3.15	3.84Mcps		reject
>>Repetition Period >>Repetition Length >>TDD DPCH Offset	M M	01	9.2.3.15 9.2.3.19A	3.84Mcps	_	reject
>>Repetition Period >>Repetition Length	М	01	9.2.3.15	3.84Mcps	_	reject
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information	M M	01	9.2.3.15 9.2.3.19A	3.84Mcps	_	reject
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify	M M M		9.2.3.15 9.2.3.19A 9.2.3.4E	3.84Mcps	- - - - YES	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period	M M M		9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16	3.84Mcps	- - - - YES	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length	M M M		9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15	3.84Mcps	- - - - YES -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset	M M M	01	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16	3.84Mcps TDD only	- - - - YES	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length	M M M	01	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15	3.84Mcps TDD only	- - - - YES -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset	M M M	01 0 <maxno< td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - - YES - -</td><td></td></maxno<>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15	3.84Mcps TDD only For 3.84Mcps	- - - - YES - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information	M M M O O O O	01	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A	3.84Mcps TDD only	- - - - YES - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information	M M M O O O O O M M	01 0 <maxno< td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - - YES - -</td><td></td></maxno<>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A	3.84Mcps TDD only For 3.84Mcps	- - - - YES - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information	M M M O O O O	01 0 <maxno< td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - - YES - -</td><td></td></maxno<>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A	3.84Mcps TDD only For 3.84Mcps	- - - - YES - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information	M M M O O O O O M M	01 0 <maxno< td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - - YES - -</td><td></td></maxno<>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A	3.84Mcps TDD only For 3.84Mcps	- - - - YES - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >>> DE Timeslot Information	M M M O O O O O M M	01 0 <maxno< td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - - YES - -</td><td></td></maxno<>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A	3.84Mcps TDD only For 3.84Mcps	- - - - YES - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >>>TDD DPCH Offset >>>DL Timeslot Information >>>Time Slot >>>Midamble Shift and Burst Type >>>TFCI Presence	M M M O O O O O	01 0 <maxno ofdlts=""></maxno>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7	3.84Mcps TDD only For 3.84Mcps	- - - YES - - - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >>STDD DPCH Offset >>DL Timeslot Information >>>Time Slot >>>Midamble Shift and Burst Type >>>TFCI Presence >>>DL Code	M M M O O O O O	01 0 <maxno ofdlts=""> 0</maxno>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7	3.84Mcps TDD only For 3.84Mcps	- - - YES - - - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >>>TDD DPCH Offset >>>DL Timeslot Information >>>Time Slot >>>Midamble Shift and Burst Type >>>TFCI Presence	M M M O O O O O	01 0 <maxno ofdlts=""> 0 <maxno are<="" area="" td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - YES - - - -</td><td></td></maxno></maxno>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7	3.84Mcps TDD only For 3.84Mcps	- - - YES - - - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >>DL Timeslot Information >>>TIMESLOT INFORMATION TIMESLOT	M M M O O O O O	01 0 <maxno ofdlts=""> 0 <maxno ofdpc<="" td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - YES - - - -</td><td></td></maxno></maxno>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7	3.84Mcps TDD only For 3.84Mcps	- - - YES - - - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >>STDD DPCH Offset >>DL Timeslot Information >>>Time Slot >>>Midamble Shift and Burst Type >>>TFCI Presence >>>DL Code Information	M M M O O O O O	01 0 <maxno ofdlts=""> 0 <maxno are<="" area="" td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - YES - - - -</td><td></td></maxno></maxno>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7	3.84Mcps TDD only For 3.84Mcps	- - - YES - - - -	
>>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >DL DPCH to modify >>Repetition Period >>Repetition Length >>TDD DPCH Offset >>DL Timeslot Information >>DL Timeslot Information >>>TIMESLOT INFORMATION TIMESLOT	M M M O O O O O	01 0 <maxno ofdlts=""> 0 <maxno ofdpc<="" td=""><td>9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7</td><td>3.84Mcps TDD only For 3.84Mcps</td><td>- - - YES - - - -</td><td></td></maxno></maxno>	9.2.3.15 9.2.3.19A 9.2.3.4E 9.2.3.16 9.2.3.15 9.2.3.19A 9.2.3.23 9.2.3.7	3.84Mcps TDD only For 3.84Mcps	- - - YES - - - -	

Oh a maralia ati a a Oa da						
Channelisation Code	+	0		For	CLOPAL	roinot
>>DL Timeslot Information LCR		0 <maxno ofDLtsL</maxno 		For 1.28Mcps TDD only	GLOBAL	reject
	1	CR>	0.00044			
>>>Time Slot LCR	M		9.2.3.24A		_	
>>>Midamble shift LCR	0		9.2.3.7A			
>>>TFCI Presence	0		9.2.1.57		_	
>>>DL Code		0 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Information LCR		OfDPC HLCRs				
>>>DPCH ID	М		9.2.3.5		_	
>>>TDD	0		9.2.3.19a		_	
Channelisation Code LCR						
>DL DPCH to delete		0 <maxno of DPCHs ></maxno 			GLOBAL	reject
>>DPCH ID	М		9.2.3.5		-	
>DL DPCH to add LCR		01		For 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	М		9.2.3.40		_	
LCR						
DL CCTrCH to Delete		0 <maxno of CCTrC Hs></maxno 			GLOBAL	reject
>CCTrCH ID	M		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 <max noofDC Hs></max 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
DSCH Information to modify		0 <maxno of DSCHs</maxno 			GLOBAL	reject
>DSCH ID	М		9.2.1.27		-	
>CCTrCH ID	0		9.2.3.3	DL CCTrCH in which the DSCH is mapped	-	
>Transport Format Set	0		9.2.1.59		-	
>Allocation/Retention Priority	0		9.2.1.1A		-	
>Frame Handling Priority	0		9.2.1.30		-	
>ToAWS	0		9.2.1.61		_	
>ToAWE	0		9.2.1.60		_	

	1	1		1	1	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
DSCH Information to add	0		DSCH TDD Information 9.2.3.5A		YES	reject
DSCH Information to delete		0 <maxno of DSCHs</maxno 			GLOBAL	reject
>DSCH ID	M		9.2.1.27		_	
USCH Information to modify		0 <maxno of USCHs ></maxno 			GLOBAL	reject
>USCH ID	M		9.2.3.27		_	
>Transport Format Set	0		9.2.1.59		_	
> Allocation/Retention Priority	0		9.2.1.1A		_	
>CCTrCH ID	0		9.2.3.2	UL CCTrCH in which the USCH is mapped	-	
>Transport Bearer Request Indicator	М		9.2.1.62A		_	
USCH Information to add	0		USCH Information 9.2.3.28		YES	reject
USCH Information to delete		0 <maxno of USCHs</maxno 			GLOBAL	reject
>USCH ID	M		9.2.3.27		_	
RL Information		01			YES	reject
>RL ID	M		9.2.1.53		_	
>Maximum Downlink Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum Downlink Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>Initial DL transmission Power	0		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore

Range Bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
Maxnoof DPCHs	Maximum number of DPCHs in one CCTrCH for
	3.84Mcps TDD.
MaxnoOfDPCHLCRs	Maximum number of DPCHs in one CCTrCH for
	1.28Mcps TDD.
MaxnoofDSCHs	Maximum number of DSCHs for one UE
MaxnoofUSCHs	Maximum number of USCHs for one UE
MaxnoofDLts	Maximum number of Downlink time slots per Radio Link
	for 3.84Mcps TDD.
MaxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link
	for 1.28Mcps TDD.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link for
	3.84Mcps TDD.
MaxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for
	1.28Mcps TDD.

9.1.43 RADIO LINK RECONFIGURATION READY

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	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		_	
RL Information Response		0 <max noofRLs ></max 		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	М		9.2.1.53		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
>DSCH Information Response	0		9.2.1.27A		YES	ignore
>USCH Information Response	0		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	0		9.2.2.49A		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range Bound	Explanation
MaxnoofRLs	Maximum number of RLs for a UE.

9.1.44 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		_	
CHOICE cause level	M				YES	ignore
>General					_	
>>Cause	М		9.2.1.6		YES	ignore
>RL specific					_	
>>RLs Causing Reconfiguration Failure		0 <max noofRLs ></max 			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	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message type	M		9.2.1.46		YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
CFN	М		9.2.1.7		YES	ignore
Active Pattern Sequence Information	0		9.2.2.A		YES	ignore

9.1.46 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message type	М		9.2.1.46		YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		-	

9.1.47 RADIO LINK RECONFIGURATION REQUEST

9.1.47.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		_	
UL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the UL.	_	
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.58	For the DL.	_	
>TFCI Signalling Mode	0		9.2.2.50		_	
>Limited Power Increase	0		9.2.2.18A		_	
DCHs to Modify	0		DCHs FDD to Modify 9.2.2.4E		YES	reject
DCHs to Add	0		DCH FDD Information 9.2.2.4D		YES	reject
DCHs to Delete		0 <maxn oofDCHs ></maxn 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
Radio Link Information		0 <maxn oofRLs></maxn 			EACH	reject
>RL ID	M		9.2.1.53		_	
>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	-	
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		-	
Transmission Gap Pattern Sequence Information	0		9.2.2.53A		YES	reject

Range Bound	Explanation				
MaxnoofDCHs	Maximum number of DCHs for a UE.				
MaxnoofRLs	Maximum number of RLs for a UE.				

9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type	Semantic	Criticality	Assigned
			and Reference	Description		Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
Node B Communication Context	M		9.2.1.48	The	YES	reject
ID				reserved value "All NBCC" shall not be used.		,
Transaction ID	M		9.2.1.62		_	
UL CCTrCH to modify		0 <maxn oofCCTr CHs></maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
>TFCS	0		9.2.1.58		_	
>Puncture Limit	0		9.2.1.50		_	
UL CCTrCH to delete		0 <maxn oofCCTr CHs></maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.3		_	
DL CCTrCH to modify		0 <maxn oofCCTr CHs></maxn 			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 delete		0 <maxn oofCCTr CHs></maxn 			EACH	notify
>CCTrCH ID	M		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 <maxn oofDSCH s></maxn 			GLOBAL	reject
>DCH ID	М		9.2.1.20		_	
RL Information		01			YES	reject
>RL ID	М		9.2.1.53			
>Maximum Downlink Power	0		DL Power 9.2.1.21	Maximum allowed power on DPCH	1	
>Minimum Downlink Power	0		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	

Range bound	Explanation			
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.			

9.1.48 RADIO LINK RECONFIGURATION RESPONSE

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	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		_	
RL Information Response		0 <maxn oofRLs></maxn 		Only one RL information response group for one group of combined RLs shall be present	EACH	ignore
>RL ID	M		9.2.1.53		_	
>DCH Information Response	0		9.2.1.20C		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range bound	Explanation			
MaxnoofRLs	Maximum number of RLs for a UE.			

9.1.49 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Node B Communication Context ID	М		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
CRNC Communication Context ID	М		9.2.1.18		YES	reject
Transaction ID	M		9.2.1.62		_	
RL Information		1 <maxn oofRLs></maxn 			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	М		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
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	М		9.2.1.46		YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
Power Adjustment Type	M		9.2.2.27		YES	ignore
DL Reference Power	C- Common		DL power 9.2.1.21	Power on DPCH	YES	Ignore
Inner Loop DL PC Status	0		9.2.2.18B		YES	ignore
DL Reference Power Information	C- Individual	1 <maxnoof RLs></maxnoof 			GLOBAL	ignore
>RL ID	M		9.2.1.53		_	
>DL Reference Power	М		DL power 9.2.1.21	Power on DPCH	_	
Max Adjustment Step	C- CommonO rIndividual		9.2.2.20		YES	ignore
Adjustment Period	C- CommonO rIndividual		9.2.2.A		YES	ignore
Adjustment Ratio	C- CommonO rIndividual		9.2.2.B		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 <i>Adjustment Type</i> IE is equal to "Individual".
CommonOrIndividual	The IE shall be present if the <i>Adjustment Type</i> 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	Semantics Description	Criticality	Assigned Criticality
Manage Discriminator	N.4		Reference			
Message Discriminator	M		9.2.1.45		YES	
Message Type			9.2.1.46	The		reject
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-	YES	reject
			0.04.00	Demand".		
Transaction ID	M		9.2.1.62		-	
Measurement ID	M		9.2.1.42		YES	reject
Dedicated Measurement Object Type	М		9.2.1.22		YES	reject
CHOICE Dedicated	M				YES	reject
Measurement Object Type						
>RL					_	
>>RL Information		1 <maxnoofr Ls></maxnoofr 			EACH	reject
>>>RL ID	М		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>PUSCH		0 <maxnoofp< td=""><td></td><td>TDD only</td><td>EACH</td><td>reject</td></maxnoofp<>		TDD only	EACH	reject
Information		USCHs>				
>>>PUSCH ID	М		9.2.3.12		_	
>RLS				FDD only	_	
>>RL Set Information		1 <maxnoofr LSets></maxnoofr 			_	
>>>RL Set ID	М		9.2.2.39		_	
>ALL RL			NULL		_	
>ALL RLS			NULL	FDD only	_	
Dedicated Measurement Type	М		9.2.1.23		YES	reject
Measurement Filter Coefficient	0		9.2.1.41		YES	reject
Report Characteristics	М		9.2.1.51		YES	reject
CFN reporting indicator	М		FN reporting indicator 9.2.1.29B		YES	reject
CFN	0		9.2.1.7		YES	reject

Range	Explanation
MaxnoofRLs	Maximum number of individual RL's a measurement can be started on.
MaxnoofPUSCHs	Maximum number of PUSCH per RL a measurement can be started on.
MaxnoofRLSets	Maximum number of individual RL Sets 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	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	reject
CRNC Communication Context ID	М		9.2.1.18		YES	ignore
Transaction ID	M		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Dedicated Measurement Object Type	0			Dedicated Measuremen t Object Type the measuremen t was initiated with	YES	ignore
>RL or ALL RL					_	
>>RL Information		1 <maxnoofr Ls></maxnoofr 			EACH	ignore
>>>RL ID	M		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>PUSCH Information		0 <maxnoofp USCHs></maxnoofp 		TDD only	EACH	reject
>>>PUSCH ID	M		9.2.3.12		_	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>CFN	0		9.2.1.7	Dedicated Measuremen t Time Reference	_	
>RLS or ALL RLS				FDD only	_	
>>RL Set Information		1 <maxnoofr LSets></maxnoofr 			_	
>>>RL Set ID	М		9.2.2.39		_	
>>>Dedicated Measurement Value	М		9.2.1.24		_	
>>>CFN	0		9.2.1.7	Dedicated Measuremen t Time Reference	-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range	Explanation
MaxnoofRLs	Maximum number of individual RL's the measurement can be started
	on.
MaxnoofPUSCHs	Maximum number of PUSCH per RL a measurement can be started on.
MaxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on.

9.1.54 DEDICATED MEASUREMENT INITIATION 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
CRNC Communication Context ID	М		9.2.1.18		YES	ignore
Transaction ID	М		9.2.1.62		_	
Measurement ID	M		9.2.1.42		YES	ignore
Cause	M		9.2.1.6		YES	ignore
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.55 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
CRNC Communication Context ID	М		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62	Do dood.	_	
Measurement ID	M		9.2.1.42		YES	ignore
CHOICE Dedicated Measurement Object Type	M		0.2.11.12	Dedicated Measuremen t Object Type the measuremen t was initiated with	YES	ignore
>RL or ALL RL					_	
>>RL Information		1 <maxnoofr Ls></maxnoofr 			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>>>DPCH ID	0		9.2.3.5	TDD only	_	
>>>PUSCH Information		0 <maxnoofp USCHs></maxnoofp 		TDD only	EACH	reject
>>>PUSCH ID	М		9.2.3.12		_	
>>>Dedicated Measurement Value Information	М		9.2.1.24A		-	
>RLS or ALL RLS				FDD only	_	
>>RL Set Information		1 <maxnoofr LSets></maxnoofr 			EACH	ignore
>>>RL Set ID	М		9.2.1.39		_	
>>>Dedicated Measurement Value Information	М		9.2.1.24A		-	

Range	Explanation
MaxnoofRLs	Maximum number of individual RL's the measurement can be started on.
MaxnoofRLSets	Maximum number of individual RL Sets a measurement can be started
	on.

9.1.56 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
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 measuremen t. Otherwise, the reserved value 'All NBCC' shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
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	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
CRNC Communication Context ID	M		9.2.1.18	The reserved value 'All CRNCC C' shall be used if the Node B Communicati on Context ID was set to 'All NBCC' when initiating the measuremen t. Otherwise, the reserved value 'All CRNCCC' shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		-	
Measurement ID	М		9.2.1.42		YES	ignore
Cause	М		9.2.1.6		YES	ignore

9.1.58 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		_	
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>RL					_	
>>RL Information		1 to <maxnoofrl s=""></maxnoofrl>			EACH	ignore
>>>RL ID	М	<u> </u>	9.2.1.53		_	
>>>Cause	M		9.2.1.6		_	
>RL Set			0.20		_	
>>RL Set Information		1 to <maxnoofrl Sets></maxnoofrl 			EACH	ignore
>>>RL Set ID	M		9.2.2.39		_	
>>>Cause	М		9.2.1.6		-	
>CCTrCH						
>>RL ID	М		9.2.1.53		_	
>>CCTrCH List		1 to <maxnocct rCH></maxnocct 			EACH	ignore
>>>CCTrCH ID	М		CCTrCH ID 9.2.3.3		_	
>>>Cause	M		9.2.1.6		_	

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofRLSets	Maximum number of RL Sets for one UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.59 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCC C" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		_	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>RL					_	
>>Radio Link Information		1 to <maxnoofrl s=""></maxnoofrl>			EACH	ignore
>>>RL ID	М		9.2.1.53		_	
>RL Set					_	
>>RL Set Information		1 to <maxnoofrl Sets></maxnoofrl 			EACH	ignore
>>>RL Set ID	М		9.2.2.39		_	
>CCTrCH						
>>RL ID	М		9.2.1.53			
>>CCTrCH List		1 to <maxnocct rCH></maxnocct 			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	М		9.2.1.46		YES	ignore
Node B communication context ID	М		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	М		9.2.1.62		_	
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	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
CRNC Communication Context ID	0		9.2.1.18	The reserved value "All CRNCC C" 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
Transaction ID	М		9.2.1.62		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 [TDD]

IE/Group Name	Presence	Range	IE Type and	Semantic Description	Criticality	Assigned Criticality
			Reference	Description		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 <maxnoof PDSCHSets</maxnoof 			GLOBAL	reject
>PDSCH Set ID	M	>	9.2.3.11		-	
>PDSCH to add Information		01		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	M		9.2.3.16		_	

>>Repetition Length	I M		9.2.3.15		_	
>>TDD Physical	M		9.2.3.20		_	
Channel Offset	IVI		0.2.0.20			
>>DL Timeslot		1			_	
Information		<maxnoofdl ts></maxnoofdl 				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift	M		9.2.3.7		_	
and Burst Type						
>>>TFCI Presence	M		9.2.1.57		_	
>>>DL Code		1			_	
Information		<maxnoofp DSCH></maxnoofp 				
>>>PDSCH ID	М		9.2.3.10		_	
>>>TDD	M		9.2.3.19		_	
Channelisation						
Code						
>PDSCH to add		01		Mandatory for	YES	reject
Information LCR	1		0.00.45	1.28Mcps TDD		
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	M		9.2.3.15		_	
>>TDD Physical	М		9.2.3.20		_	
Channel Offset					OL ODAL	
>>DL Timeslot Information LCR		1 <maxnoofdl tsLCR></maxnoofdl 			GLOBAL	reject
>>>Time Slot LCR	M	ISLOIV	9.2.3.24A		_	
>>>TFCI Presence	M		9.2.1.57		_	
>>>DL Code		1	0.20		GLOBAL	reject
Information LCR		<maxnoofp DSCH></maxnoofp 			0202/12	10,001
>>>>PDSCH ID	М		9.2.3.10		_	
>>>>TDD	M		9.2.3.19a		_	
Channelisation						
Code LCR						
PDSCH Sets to Modify		0 <maxnoof PDSCHSets ></maxnoof 			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH to modify Information		01		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	0		9.2.3.16		_	
>>Repetition Length	0		9.2.3.15		_	
>>TDD Physical	0		9.2.3.20		_	
Channel Offset						
>>DL Timeslot		0			_	
Information		<maxnoofdl ts></maxnoofdl 				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift	0		9.2.3.7			
and Burst Type						
>>>TFCI Presence	0		9.2.1.57		_	
>>>DL Code		0			_	
Information		<maxnoofp DSCH></maxnoofp 				
>>>>PDSCH ID	М		9.2.3.10		_	
>>>>TDD	М		9.2.3.19		_	
Channelisation						
Code						

>PDSCH to modify		01	1	Mandatory for	YES	reject
Information LCR		01		1.28 Mcps TDD	120	reject
>>Repetition Period	0		9.2.3.16	וווו	_	
>>Repetition Length	0		9.2.3.15		_	
>>TDD Physical	0		9.2.3.20		_	
Channel Offset						
>>DL Timeslot		0			GLOBAL	reject
Information LCR		<maxnoofdl tslcr=""></maxnoofdl>				-
>>>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 <maxnoofp DSCHLCR></maxnoofp 			GLOBAL	reject
>>>PDSCH ID	М		9.2.3.10		_	
>>>TDD	M		9.2.3.19a		_	
Channelisation Code LCR						
PDSCH Sets to Delete		0 <maxnoof PDSCHSets</maxnoof 			GLOBAL	reject
>PDSCH Set ID	М		9.2.3.11		-	
PUSCH Sets to add		0 <maxnoof< td=""><td></td><td></td><td>GLOBAL</td><td>reject</td></maxnoof<>			GLOBAL	reject
		PUSCHSets >				-
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH to add Information		01		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	М		9.2.3.16		_	
•	M		9.2.3.15		_	
>>Repetition Length	M		9.2.3.20		_	
>>TDD Physical Channel Offset	l IVI		3.2.3.20		_	
>>UL Timeslot		1			_	
Information		<maxnooful ts></maxnooful 				
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift	М		9.2.3.7		_	
and Burst Type						
>>>TFCI Presence	M		9.2.1.57		_	
>>>UL Code		1			_	
Information		<maxnoofp USCH></maxnoofp 				
>>>PUSCH ID	М		9.2.3.12		_	
>>>TDD	М		9.2.3.19		_	
Channelisation						
Code						
>PUSCH to add	0	1		For 1.28Mcps	YES	reject
Information LCR				TDD only		
>>Repetition Period	M		9.2.3.16		_	
>>Repetition Length	М		9.2.3.15		_	
>>TDD Physical Channel Offset	M		9.2.3.20		_	
>>UL Timeslot	1	1			GLOBAL	reject
Information LCR		<maxnooful tslcr=""></maxnooful>				-,,
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble shift LCR	M		9.2.3.7A			
>>>TFCI Presence	М		9.2.1.57		_	

>>>UL Code		1			GLOBAL	reject
Information LCR		<maxnoofp USCHLCR></maxnoofp 			GLOBAL	Тејест
>>>PUSCH ID	М	00020.0	9.2.3.12		_	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PUSCH Sets to Modify		0 <maxnoof PUSCHSets ></maxnoof 			GLOBAL	reject
>PUSCH Set ID	М		9.2.3.13		-	
>PUSCH to modify Information		01		For 3.84Mcps TDD only	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		-	
>>UL Timeslot Information		0 <maxnooful ts></maxnooful 			-	
>>>Time Slot	М		9.2.3.23		_	
>>>Midamble Shift and Burst Type	0		9.2.3.7		-	
>>>TFCI Presence	0		9.2.1.57		_	
>>>UL Code Information		0 <maxnoofp DSCH></maxnoofp 			-	
>>>PUSCH ID	М	D00(1)	9.2.3.12		_	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PUSCH to modify Information LCR		01		For 1.28Mcps TDD only	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		-	
>>UL Timeslot Information LCR		0 <maxnooful tsLCR></maxnooful 		For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	М		9.2.3.24A		_	
>>>Midamble shift LCR	M		9.2.3.7A			
>>>TFCI Presence	0		9.2.1.57		-	
>>>UL Code Information LCR		0 <maxnoofp DSCHLCR></maxnoofp 			GLOBAL	reject
>>>PUSCH ID	M		9.2.3.12		_	
>>>>TDD Channelisation Code LCR	М		9.2.3.19a		-	
PUSCH Sets to Delete		0 <maxnoof PUSCHSets ></maxnoof 			GLOBAL	reject
>PUSCH Set ID	М		9.2.3.13		-	
•	•	•	•	•		

Range bound	Explanation
Maxnoof PDSCH Sets	Maximum number of PDSCH Sets in a cell.
Maxnoof PDSCH	Maximum number of PDSCH in a cell for 3.84Mcps TDD only.
MaxnoOfPDSCHLCR	Maximum number of PDSCH in a cell for 1.28Mcps TDD only.

Maxnoof PUSCH Sets	Maximum number of PUSCH Sets in a cell.
Maxnoof PUSCH	Maximum number of PUSCH in a cell for 3.84Mcps
	TDD.
Maxnoof PUSCHLCR	Maximum number of PUSCH in a cell for 1.28Mcps TDD.
MaxnoofDLts	Maximum number of Downlink time slots in a cell for
Maxhooldets	3.84Mcps 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

9.1.63 PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE [TDD]

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	reject
Transaction ID	M		9.2.1.62		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.64 PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and	Semantic Descriptio	Criticality	Assigned Criticality
			Reference	n ·		_
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	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.6		_	
> Set specific					_	
>>Unsuccessful DL Shared channel set		0 <maxnoof pdschsets=""></maxnoof>			EACH	ignore
>>>PDSCH Set ID	М		9.2.3.13		-	
>>>Cause	M		9.2.1.6		YES	ignore
>>Unsuccessful UL Shared channel set		0 <maxnoof puschsets<="" td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnoof>			EACH	ignore
>>>PUSCH Set ID	M	>	9.2.3.13		_	
>>>Cause	M		9.2.1.6		-	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

Range bound	Explanation		
Maxnoof PDSCH Sets	Maximum number of PDSCH Sets in a cell.		
Maxnoof PUSCH Sets	Maximum number of PUSCH Sets in a cell.		

9.1.65 RESET REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantic Descripti on	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
>CommunicationContext					_	
>>Communication Context Information		1 <maxco mmunicatio nContext></maxco 			EACH	reject
>>>CHOICE Communication Context Type	M				_	
>>>CRNC Communication Context					_	
>>>>CRNC Communication Context ID	M		9.2.1.18		_	
>>>Node B Communication Context					_	
>>>>Node B Communication Context ID	M		9.2.1.48		-	
>CommunicationControl Port					-	
>>Communication Control Port Information		1 <maxccpi nNodeB></maxccpi 			EACH	reject
>>>Communication Control Port ID	М		9.2.1.15		_	
>Node B			NULL		-	

Range bound	Explanation		
maxCommunicationContext	Maximum number of communication contexts that can exist in the Node-B		
maxCCPinNodeB	Maximum number of communication control ports that can exist in the Node B		

9.1.66 RESET RESPONSE

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	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
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Transaction ID	M		9.2.1.62		_	
DL Time Slot ISCP Info	0		9.2.3.4F	Mandatory For 3.84Mcps TDD only	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.40A	Mandatory For 1.28Mcps TDD only	YES	ignore

9.1.68 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CRNC Communication Context ID	M		9.2.1.18		YES	ignore
RL Information		0 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	M		9.2.1.53		_	

Range bound	Explanation
MaxnoofRLs	Maximum number of radio links for one UE

9.1.69 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Orthodinty
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
Information Exchange	M		9.2.1.36A		YES	reject
Object Type						
CHOICE Information	M		9.2.1.36A		YES	reject
Exchange Object Type						
>Cell					-	
>>C-ID	M		9.2.1.9		-	
Information Type	M		9.2.1.36D		YES	reject
Information Report	M		9.2.1.36B		YES	reject
Characteristics						

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		ı	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE Information Exchange Object Type	M		9.2.1.36A		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	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
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	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		-	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE Information Exchange Object Type	М		9.2.1.36A		YES	ignore
>Cell					-	
>>Requested Data Value Information	М		9.2.1.51B		-	

9.1.73 INFORMATION EXCHANGE TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	J
Information Exchange ID	М		9.2.1.36C		YES	ignore

9.1.74 INFORMATION EXCHANGE FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Information Exchange ID	M		9.2.1.36C		YES	ignore
Cause	M		9.2.1.6		YES	ianore

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		115			GLOBAL	reject
>Time Slot	M		9.2.3.23		_	
Cell Sync Burst Transmission Initiation Information		01			GLOBAL	reject
>CSB Transmission ID	М		9.2.3.4N			
>SFN	M		9.2.1.53A		_	
>Cell Sync Burst Code	М		9.2.3.4G		_	
>Cell Sync Burst Code shift	M		9.2.3.4H			
>Initial DL transmission Power	М		DL Power 9.2.1.21		_	
Cell Sync Burst Measurement Initiation Information		01			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	М		9.2.3.18 ^E		_	
>SFN	0		9.2.1.53A		_	
>Synchronisation Report Characteristics	М		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	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	reject
Time Slot	M		9.2.3.23		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 < maxnoofC ellSyncBur sts >			Global	reject
>CSB Transmission ID	M		9.2.3.4N		_	
>Sync Frame number to transmit	M		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			YES	reject
>Cell Sync Burst Measurement Information		1 <maxnoof CellSyncB ursts></maxnoof 			GLOBAL	reject
>>Sync Frame number to receive	M		Sync Frame number 9.2.3.18C		-	
>>Cell Sync Burst Information		1< maxnoofre ceptionspe rSyncFram e>			-	
>>>CSB Measurement	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

Range bound	Explanation
maxnoofCellSyncBursts	Maximum number of cell sync bursts per cycle
maxnoofreceptionsperSyncFrame	Maximum number of cell sync burst receptions per
	Sync Frame

9.1.79 CELL SYNCHRONISATION RECONFIGURATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	reject
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	ignore

9.1.80 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	M		9.2.1.62		_	
Cell Synchronisation Information		1 <maxcellin nodeb=""></maxcellin>			EACH	ignore
>C-ID	М		9.2.1.9		YES	ignore
>CHOICE Synchronisation Report Type					YES	ignore
>>Initial Phase or Steady-State Phase					_	
>>>Cell Sync Burst Measured Information		1 <maxnoof CellSyncB ursts></maxnoof 			_	
>>>SFN	М		9.2.1.53A		_	
>>>Cell Sync Burst Information		1 <maxno ofreception sperSyncF rame></maxno 			-	
>>>>CHOICE Cell Sync Burst Availability Indicator	M				_	
>>>> Cell Sync Burst Available					_	
>>>>>Cell Sync Burst	М		9.2.3.4L		_	

Timing				
>>>>Cell	M	9.2.3.4K	_	
Sync Burst SIR				
>>>> Cell Sync		NULL	_	
Burst not				
Available				
>>Late-Entrant Cell		NULL		·
>>Frequency Acquisition		NULL	_	

Range bound	Explanation
maxCellinNodeB	Maximum number of Cells in a Node B
maxnoofCellSyncBursts	Maximum number of cell sync bursts per cylce
maxnoofreceptionsperSyncFrame	Maximum number of cell sync burst receptions per
	Sync Frame

9.1.82 CELL SYNCHRONISATION TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	0		9.2.3.4N		YES	ignore
CSB Measurement ID	0		9.2.3.41		YES	ignore

9.1.83 CELL SYNCHRONISATION FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
C-ID	M		9.2.1.9		YES	ignore
CSB Transmission ID	0		9.2.3.4N		YES	ignore
CSB Measurement ID	0		9.2.3.41		YES	ignore
Cause	M		9.2.1.6		YES	ignore

9.1.84 CELL SYNCHRONISATION ADJUSTMENT REQUEST [TDD]

IE/Group Name	Presence	Range	IE type and 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		_	
Cell Adjustment Information		1 <maxcelli nNodeB></maxcelli 			EACH	ignore
>C-ID	M		9.2.1.9		_	
>Frame Adjustment value	0		9.2.3.5C		_	
>Timing Adjustment value	0		9.2.3.22a		_	
>DL Transmission Power	0		9.2.1.21		_	
>SFN	0		9.2.1.53A		_	

Range bound	Explanation		
MaxCellinNodeB	Maximum number of Cells in a Node B		

9.1.85 CELL SYNCHRONISATION ADJUSTMENT RESPONSE [TDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	М		9.2.1.45		_	
Message Type	М		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Criticality Diagnostics	0		9.2.1.17		YES	Ignore

9.1.86 CELL SYNCHRONISATION ADJUSTMENT FAILURE [TDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		_	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
CHOICE cause level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.6		_	
>Cell specific					_	
>>Unsuccessful Cell Information Response		1 <maxcelli nNodeB></maxcelli 			EACH	ignore
>>>C-ID	M		9.2.1.9		_	
>>>Cause	M		9.2.1.6		_	
Criticality Diagnostics	0		9.2.1.17		YES	Ignore

Range bound	Explanation
MaxCellinNodeB	Maximum number of Cells in a Node B

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 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.

9.2.1 Common parameters

9.2.1.1 Add/Delete Indicator

The add/delete indicator shall notify the RNC 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			ENUMERAT	
			ED(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	М		INTEGER (015)	This IE indicates the priority of the request. 0 = spare. 1 = highest priority.
Pre-emption Capability	М		ENUMERAT ED(shall not trigger pre- emption, may trigger pre-emption)	
Pre-emption Vulnerability	M		ENUMERAT ED (not pre- emtable, pre-emtable)	

9.2.1.2 Availability Status

The availability status is used to indicate more detailed information of the availability of the resource. In accordance with ref. [6], following values are defined. If the value of this attribute is an empty set, this implies that none of the status conditions described in ref. [6] are present.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Availability Status			ENUMERAT ED (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. It is allocated at Node B and it is unique for each transport bearer under establishment to/from the Node B.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Binding ID			Octetstring	
			(14,)	

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			ENUMERAT ED(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 s	Criticality	Assigned Criticality
Burst Start	М		INTEGER (015)	See [10] and [21]	-	
Burst Length	M		INTEGER (1025)	See [10] and [21]	_	
Burst freq	M		INTEGER (116)	See [10] and [21]	_	

9.2.1.6 Cause

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE Cause group		,		
>Radio Network Layer				
>Radio Network Layer	M		Enumerated	
Cause			(unknown C-ID,	
			Cell not available,	
			Power level not supported,	
			DL radio resources not available.	
			UL radio resources not	
			available.	
			RL Already	
			Activated/allocated,	
			Node B Resources	
			Unavailable,	
			Measurement not supported	
			for the object,	
			Combining Resources not available,	
			Requested configuration not	
			supported,	
			Synchronization failure,	
			Priority transport channel	
			established,	
			SIB Origination in Node B not	
			Supported,	
			Requested Tx Diversity Mode	
			not supported,	
			Unspecified, BCCH scheduling error,	
			Measurement Temporarily not	
			Available,	
			Invalid CM Setting,	
			Reconfiguration CFN not	
			elapsed,	
			Number of DL codes not	
			supported,	
			S-CPICH not supported, Combining not supported,	
			UL SF not supported,	
			DL SF not supported,	
			Common Transport Channel	
			Type not supported,	
			Dedicated Transport Channel	
			Type not supported,	
			Downlink Shared Channel	
			Type not supported,	
			Uplink Shared Channel Type not supported,	
			CM not supported,	
			Tx diversity no longer	
			supported,	
			Unknown Local Cell ID,	
			Number of UL codes not	
			supported,	
			Information temporarily not available,	
			Information Provision not	
			supported for the object,	
			Cell Synchronisation not	
			supported,	
			Cell Synchronisation	
			Adjustment not supported,	
			DPC Mode Change not	
			Supported,	

	,	
		IPDL already activated, IPDL not supported, IPDL parameters not available, Frequency Acquisition not
		supported)
>Transport Layer		,
>Transport Layer Cause	M	Enumerated (Transport resource unavailable, Unspecified,)
>Protocol		
>Protocol Cause		Enumerated (Transfer syntax error, Abstract syntax error (reject), Abstract syntax error (ignore and notify), Message not compatible with receiver state, Semantic error, Unspecified, Abstract syntax error (falsely constructed message),)
>Misc		
>Miscellaneous Cause	М	Enumerated (Control processing overload Hardware failure, O&M intervention, Not enough user plane processing resources, Unspecified,)

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerning capability is missing. On the other hand, "not available" cause values indicate that the concerning 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)
Cell not Available,	The concerning cell or local cell is not available
Cell Synchronisation not supported	The concerning cell(s) do not support Cell Synchronisation
Combining not supported	The Node B does not support RL combining for the concerning 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 concerning cell(s) do not support Compressed Mode
Common Transport Channel Type not	The concerning cell(s) do not support the RACH and/or FACH and/or
supported	CPCH Common Transport Channel Type
Dedicated Transport Channel Type not	The concerning cell(s) do not support the Dedicated Transport Channel
supported	Type
DL Radio Resources not Available	The Node B does not have sufficient DL radio resources available
DL SF not supported	The concerning cell(s) do not support the requested DL SF
DL Shared Channel Type not	The concerning cell(s) do not support the Downlink Shared Channel
supported	Туре
DPC Mode Change not Supported	The concerning cells do not support DPC mode changes
Frequency Acquisition not supported	The concerning cell(s) do not support Frequency Acquisition
Information Provision not supported	The requested information provision is not supported for the concerned
for the object	object types
Information temporarily not available	The requested information can temporarily not be provided
Invalid CM Settings	The concerning cell(s) consider the requested Compressed Mode settings invalid

IPDL already activated	The concerning cell(s) have already active IPDL ongoing
IPDL not supported	The concerning cell(s) do not support the IPDL
IPDL parameters not available	The concerning cell(s) do not have IPDL parameters defining IPDL to be applied
Measurement not Supported For The Object	At least one of the concerning cell(s) does not support the requested measurement on the concerning object type
Measurement Temporarily not Available	The Node B can temporarily not provide the requested measurement value
Node B resources unavailable	The Node B does not have sufficient resources available
Number of DL codes not supported	The concerning cell(s) do not support the requested number of DL codes
Number of UL codes not supported	The concerning cell(s) do not support the requested number of UL codes
Power Level not Supported	A DL power level was requested which the concerning cell(s) do not support
Priority transport channel established	The CRNC cannot perform the requested blocking since a transport channel with a high priority is present
Reconfiguration CFN not elapsed	The requested action cannot be performed due to that a COMMIT message was received previously, but the concerning CFN has not yet elapsed
Requested Configuration not	The concerning cell(s) do not support the requested configuration i.e.
Supported	power levels, Transport Formats, physical channel parameters
Requested Tx Diversity mode not supported	The concerning cell(s) do not support the requested transmit diversity mode
RL already Activated/ allocated	The Node B has already allocated an RL with the requested RL-id for this UE context
S-CPICH not supported	The concerning cell(s) do not support S-CPICH
SIB Orgination in Node B not Supported	The Node B does not support the origination of the requested SIB for the concerning cell
Synchronisation Failure	Loss of UL Uu synchronisation
Cell Synchronisation Adjustment not supported	The concerning cell(s) do not support Cell Synchronisation Adjustment
Tx diversity no longer supported	Tx diversity can no longer be supported in the concerning cell.
UL Radio Resources not Available	The Node B does not have sufficient UL radio resources available
UL SF not supported	The concerning cell(s) do not support the requested minimum UL SF
UL Shared Channel Type not supported	The concerning cell(s) do not support the Uplink Shared Channel Type
Unknown C-ID	The Node B is not aware of a cell with the provided C-ID
Unknown Local Cell ID	The Node B is not aware of a local cell with the provided Local Cell ID
Unspecified	Sent when none of the above cause values applies but still the cause is Radio Network layer related

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
	concerning criticality indicated "reject" (see subclause 10.3)
Abstract Syntax Error (Ignore and	The received message included an abstract syntax error and the
Notify)	concerning 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 the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the allocated Spreading Factor. [FDD- For the PRACH, the reference spreading factor shall be the minimum possible spreading factor amongst the ones defined by the 'RACH slot format' IE(s) in the Common Transport Channel Setup or Reconfiguration procedures. For the PCPCH, the reference spreading factor shall be the minimum spreading factor computed from the TFCS as described in [8].]

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Common Transport Channel Setup
- Common Transport Channel Deletion
- [FDD- Common Transport Channel Reconfiguration]

For the Common Transport Channel Setup procedure, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall be credited to the Capacity Credit for the Common Transport Channel Deletion one.

[FDD- For the Common Transport Channel Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited if this difference is negative).]

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the "DL cost" shall be applied to the "DL or Global Capacity Credit" and the "UL Cost" shall be applied to the "UL Capacity Credit". If it is modelled as shared resources, both the "DL cost" and the "UL cost" shall be applied to the "DL or Global Capacity Credit".

[FDD- When the Common Transport Channel Setup, Deletion or Reconfiguration procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH, AICH, PCPCH, CD/CA-ICH and AP-AICH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

[FDD- The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by a physical channel, the cost credited to or debited from the Capacity Credit for this physical channel shall be taken as N times the cost given in the consumption law, where N is the number of channelization codes.]

[TDD - When the Common Transport Channel Setup, or Deletion procedures are used, the Capacity Credit shall be updated considering all physical channels related in these procedures (S-CCPCH, PICH, PRACH), i.e. one cost shall be credited to or debited from the Capacity Credit per physical channel.]

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SF allocation law		<maxnumberofs F></maxnumberofs 		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost	M		INTEGER (065535)	
>UL cost	М		INTEGER (065535)	

Range bound	Explanation
MaxNumberOfSF	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				
> T _{UTRAN-GPS} Measurement Accuracy Class				
>>Tutran-gps Measurement Accuracy Class	М		Tutran-gps Accuracy Class 9.2.1.64C	

9.2.1.10 Common Measurement Object Type

The Common Measurement Object type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Common Measurement			ENUMERAT	
Object Type			ED (CELL,	
, ,,			RACH,	
			CPCH,)	

9.2.1.11 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERAT ED (Received total wide band power, Transmitted Carrier Power, Acknowledg ed PRACH preambles, UL Timeslot ISCP, Acknowledg ed PCPCH Access Preambles, Detected PCPCH Access Preambles,, UTRAN GPS Timing of Cell Frames for LCS, SFN- SFN Observed Time Difference)	UL Timeslot ISCP is used by TDD only, Acknowledged PRACH preambles, Acknowledged PCPCH Access Preambles, Detected PCPCH Access Preambles are used by FDD only

9.2.1.12 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Common				
Measurement Value				
>Transmitted Carrier Power				
>>Transmitted Carrier Power Value	M		INTEGER(0100)	According to mapping in [22] and [23]
>Received Total Wide Band Power				
>>Received total wide band power Value	M		INTEGER(0621)	According to mapping in [22] and [23]
>Acknowledged PRACH Preambles				FDD Only
>>Acknowledged PRACH Preamble Value	M		INTEGER(0240,)	According to mapping in [22]
>UL Timeslot ISCP				TDD Only
>>UL Timeslot ISCP	M		INTEGER(0127)	According to mapping in [23]
>Acknowledged PCPCH Access Preambles				FDD Only
>>Acknowledged PCPCH Access Preambles	М		INTEGER(0. .15,)	According to mapping in [22]
>Detected PCPCH Access Preambles				FDD Only
>>Detected PCPCH Access Preambles	М		INTEGER(0240,)	According to mapping in [22]
>UTRAN GPS Timing of Cell Frames for LCS				
>>T _{UTRAN-GPS} Measurement Value Information	М	·	9.2.1.64A	
>SFN-SFN Observed Time Difference				
>> SFN-SFN Measurement Value Information	М		9.2.1.53E	

9.2.1.12A Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether or not 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	Criticality	Assigned Criticality
CHOICE Measurement Availability Indicator	М				_	
>Measurement Available					_	
>>Common Measurement value	М		9.2.1.12		_	
>Measurement not Available			NULL		_	

9.2.1.13 Common Physical Channel ID

Common Physical Channel ID is the unique identifier for one common physical channel within a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Common Physical Channel ID			Integer(0 255)	

9.2.1.13A Common Physical Channel Status Information

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
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(0 255)	

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		_	

9.2.1.14B Common Transport Channel Status Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Common Transport Channel ID	М		9.2.1.14		-	
Resource Operational State	М		9.2.1.52		_	
Availability Status	М		9.2.1.2		_	

9.2.1.15 Communication Control Port ID

A Communication Control Port corresponds to one signalling bearer between the RNC and Node B for the control of Node B Communication Contexts. 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	Semantics description
			reference	
Communication Control Port ID			INTEGER	
			(065535)	

9.2.1.16 Configuration Generation ID

The Configuration Generation ID describes the generation of the configuration of logical resources in a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Configuration Generation ID			Integer(0 255)	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
Procedure ID		01		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error
>Procedure Code	М		INTEGER (0255)	
>Ddmode	М		ENUMERAT ED (FDD, TDD, Common)	Common = common to FDD and TDD.
Triggering Message	0		ENUMERAT ED(initiating message, successful outcome, unsuccessful outcome, outcome,	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.
Procedure Criticality	0		ENUMERAT ED(reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure). The value 'ignore' shall never be used.
Transaction ID	0		Transaction ID 9.2.1.62	
Information Element Criticality Diagnostics		0 to <maxnoof errors=""></maxnoof>		
>IE Criticality	М		ENUMERAT ED(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 In case of a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence In case of a missing IE: The number of occurrences up to but not including the missing occurrence. Note: All the counted occurrences of the reported IE must have the same topdown hierachical 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.
>Type of Error	M	ENUMERAT	
		ED(not	
		understood,	
		missing,)	

Range bound	Explanation
Maxnooferrors	Maximum no. 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			INTEGER	2^20-1 is reserved value to
ID			(02^20 –1)	indicate all the CRNC
				communication contexts that can be reached by the
				communication control port
				(All CRNCCC).

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 the CRNC how the Capacity Credit is consumed by NBAP set of procedures, depending on the [FDD - allocated Spreading Factor and the RL/RLS situation] [TDD – allocated Spreading Factor on each DPCH and the assigned timeslot]. [FDD- In uplink, the reference spreading factor shall be the minimum spreading factor signalled in the Radio Link Setup Request message (*Min UL Channelisation Code length* IE).].

This capacity consumption law indicates the consumption law to be used with the following procedures:

- Radio Link Setup
- Radio Link Addition
- Radio Link Reconfiguration
- Radio Link Deletion
- [TDD Physical Shared Channel Reconfiguration]

For the Radio Link Setup and Radio Link Addition procedures, the cost given in the consumption law shall be debited from the Capacity Credit, whereas it shall credited to the Capacity Credit for the Radio Link Deletion procedure. For the

Radio Link Reconfiguration procedure, the difference of the consumption cost for the new spreading factor and the consumption cost for the old spreading factor shall be debited from the Capacity Credit (or credited when this difference is negative).

If the modelling of the internal resource capability of the Node B is modelled independently for the Uplink and Downlink, the DL cost shall be applied to the DL or Global Capacity Credit and the UL Cost shall be applied to the UL Capacity Credit. If it is modelled as shared resources, both the DL costs" and the UL costs shall be applied to the DL or Global Capacity Credit.

[FDD - For a Radio Link creating a Radio Link Set (first RL of a RLS), the cost for the RL (cost 2) and RLS (cost 1) shall be taken into account. When adding a Radio Link to a Radio Link Set, only the RL cost (cost 2) shall be taken into account.

In the case of multiple Radio Links are established in one procedure, for every created Radio Link Set the first Radio Link is always the Radio Link with the lowest repetition number.]

[FDD- When a PDSCH is allocated in the Radio Link Setup procedure, the processing cost associated to this PDSCH, equal to the DL cost RL, shall be debited from the Capacity Credit, in addition to the processing cost of the radio links. In a similar way, this cost shall be credited to the Capacity Credit, when a PDSCH is deleted and the difference between the new cost and the old cost shall be debited from the Capacity Credit (or credited if this difference is negative) when a PDSCH is reconfigured.]

[FDD- The costs given in the consumption law are the costs per channelization code. When multiple channelization codes are used by either the radio links or the PDSCH, the cost credited to or debited from the Capacity Credit shall be taken as N times the cost for one code, where N is the number of channelization codes.]

[TDD –The cost for a radio link is a sum of the costs for each DPCH. For the first DPCH assigned to any user in a cell within a timeslot, the initial cost for a DPCH in a timeslot (cost 1) and the cost for a DPCH (cost 2) shall be taken into account. For any DPCH that is not the first DPCH assigned for any user in a cell within a timeslot, only the cost for a DPCH (cost 2) shall be taken into account.

[TDD – The cost for shared channels is a 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 case of Physical Shared Channel Reconfiguration, the sum of the consumption cost of the each PDSCH/PUSCH of the previous configuration shall be credited to the capacity credit, and the sum of the consumption cost of each PDSCH/PUSCH of the new configuration shall be subtracted from the capacity credit.]

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SF allocation law		1 <maxnumberof SF></maxnumberof 		[FDD - For each SF, cost of its allocation: the first instance corresponds to SF = 4, the second to SF = 8, the third to SF = 16 and so on.] [TDD - For each SF, cost of its allocation: the first instance corresponds to SF = 1, the second to SF = 2, the third to SF = 4 and so on.]
>DL cost 1	M		INTEGER (065535)	[FDD – This is the cost of a RLS,] [TDD – This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>DL cost 2	М		INTEGER (065535)	[FDD – This is the cost of a RL,] [TDD – This is the cost of a DPCH/PDSCH/PUSCH]
>UL cost 1	M		INTEGER (065535)	FDD – This is the cost of a RLS,] [TDD – This is the additional cost of the first DPCH/PDSCH/PUSCH assigned to any user in a cell within a timeslot.]
>UL cost 2	М		INTEGER (065535)	[FDD – This is the cost of a RL,] [TDD – This is the cost of a DPCH/PDSCH/PUSCH.]

Range bound	Explanation
MaxNumberOfSF	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

 $\label{thm:condition} The \textit{DCH Information Response} \ IE \ provides \ information \ for \ DCHs \ that \ have \ been \ established \ or \ modified.$

IE/Group Name	Presence	Range	IE type and	Semantics description	Criticality	Assigned Criticality
			reference	S		
DCH Information Response		1 to <maxnoofdc Hs></maxnoofdc 		Only one DCH per set of coordinated DCH shall be included	-	
>DCH ID	M		9.2.1.20		ı	
>Binding ID	0		9.2.1.4		ı	
>Transport Layer Address	0		9.2.1.63		_	

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCH per UE.

9.2.1.21 DL Power

The DL Power IE indicates a power level relative to the [FDD-primary CPICH power] [TDD-primary CCPCH power] configured in a cell [FDD-If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DL Power			Enumerated(-35+15dB)	Step 0.1dB

9.2.1.22 Dedicated Measurement Object Type

The Dedicated Measurement Object type indicates the type of object that the measurement is to be performed on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement			ENUMERAT	
Object Type			ED (RL,	
			RLS,	
			ALL RL,	
			ALL RLS,)	

9.2.1.23 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Dedicated Measurement Type			ENUMERAT	RSCP, Rx Timing Deviation
			ED (SIR,	are used by TDD only, Round
			SIR Error,	Trip Time, SIR Error are used
			Transmitted	by FDD only.
			Code Power,	
			RSCP, Rx	
			Timing	
			Deviation,	
			Round Trip	
			Time,)	

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
CHOICE Dedicated Measurement Value				
>SIR Value				
>>SIR value	М		INTEGER(063)	According to mapping in [22] and [23]
>SIR Error Value				FDD only
>>SIR error Value	М		INTEGER(0. .125)	According to mapping in [22]
>Transmitted Code Power Value				
>>Transmitted Code Power Value	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 Value				3.84Mcps TDD only
>>Rx Timing Deviation	М		INTEGER(08191)	According to mapping in [23]
>Round Trip Time				FDD only
>>Round Trip Time	М		INTEGER(032767)	According to mapping in [22]

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	Criticality	Assigned Criticality
CHOICE Measurement	M				-	
Availability Indicator						
>Measurement Available					_	
>>Dedicated	M		9.2.1.24		_	
Measurement Value						
>>CFN	0		9.2.1.7	Dedicated	_	
				Measuremen		
				t Time		
				Reference		
>Measurement not			NULL		_	
Available						

9.2.1.24B DGPS Corrections

The DGPS Corrections IE contains DGPS information used by the UE Positioning A-GPS method. For further details on the meaning of parameters, see [28].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GPS TOW	М		INTEGER (0604799)	Time in seconds. This field indicates the baseline time for which the corrections are valid
Status/Health	M		ENUMERAT ED (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 <maxnosat></maxnosat>		
>SatID	М		INTEGER (063)	Satellite ID
>IODE	M		Bit string(8)	This IE is the sequence number for the ephemeris for the particular satellite. It can be used to determine if new ephemeris is used for calculating the corrections that are provided. This eightbit 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		ENUMERAT ED (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- o) 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 Scaling factor 0.32 meters
>Range Correction Rate	М		INTEGER (-127 127)	Scaling factor 0.032 m/s

Range Bound	Explanation
MaxNoSat	Maximum number of satellites for which information can be
	provided

9.2.1.25 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Diversity Control Field			ENUMERAT	
			ED(May,	
			Must, Must	
			not)	

9.2.1.26 Diversity Indication

The Diversity Indication indicates if the RL has been or has not been combined with another RL.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Diversity Indication			ENUMERAT	
			ED	
			(Combined,	
			not	
			combined)	

9.2.1.27 DSCH ID

The DSCH ID uniquely identifies a DSCH within a Node B Communication Context.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DSCH ID			INTEGER (0255)	

9.2.1.27A DSCH Information Response

The DSCH Information Response IE provides information for DSCHs that have been established or modified.

IE/Group Name	Presence	Range	IE type and reference	Semantics description s	Criticality	Assigned Criticality
DSCH Information Response		1 to <numof DSCH></numof 			_	
>DSCH ID	M		9.2.1.27		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		_	

Range bound	Explanation
MaxnoofDSCHs	Maximum number of DSCHs for one UE.

9.2.1.28 DSCH Transport Format Set

Void

9.2.1.29 DSCH Transport Format Combination Set

Void

9.2.1.29A 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			ENUMERAT	End of audit sequence = all
Indicator			ED(end of	audit information has been
			audit	provided by the Node B;
			sequence,	Not end of audit sequence =
			not end of	more audit information is
			audit	available;
			sequence)	

9.2.1.29B FN reporting indicator

Frame Number reporting indicator.

Indicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
FN reporting indicator			ENUMERAT	
			ED(FN	
			Reporting	
			Required,	
			ĖΝ	
			Reporting	
			Not	
			Required)	

9.2.1.30 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH/DSCH for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Frame Handling Priority			INTEGER	0=lower priority,
			(015)	15=higher priority

9.2.1.31 Frame Offset

Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame_offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Frame Offset			INTEGER	Frames
			(0255)	

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 (1	
			16)	

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 <maxnosat></maxnosat>		
>Transmission TOW	М		INTEGER	Time of the Week when the
			(01048575)	message is broadcast.
>SatID	М		INTEGER	Satellite ID of the satellite
			(063)	from which the information is
				obtained
>TLM Message	M		Bit string(14)	
>TIm Revd (C)	M		Bit string(2)	
>HO-Word	M		Bit string(22)	
>WN	M		Bit string(10)	
>C/A or P on L2	M		Bit string(2)	
>User Range Accuracy	М		Bit string(4)	
Index				
>SV Health	M		Bit string(6)	
>IODC	M		Bit string(10)	
>L2 P Data Flag	M		Bit string(1)	
>SF 1 Reserved	M		Bit string(87)	
>T _{GD}	М		Bit string(8)	
>t _{oc}	M		Bit string(16)	
>af ₂	M		Bit string(8)	
>af₁	M		Bit string(16)	
>af ₀	M		Bit string(22)	
>C _{rs}	M		Bit string(16)	
>∆n	M		Bit string(16)	
>M ₀	M		Bit string(32)	
>C _{uc}	М		Bit string(16)	
>e	M		Bit string(32)	
>C _{us} >(A) ^{1/2}	М		Bit string(16)	
>(A) ^{1/2}	М		Bit string(32)	
>t _{oe}	M		Bit string(16)	
>Fit Interval Flag	М		Bit string(1)	
>AODO	М		Bit string(5)	
>C _{ic}	М		Bit string(16)	
>OMEGA ₀	М		Bit string(32)	
>C _{is}	М		Bit string(16)	
>i ₀	М	<u> </u>	Bit string(32)	
>C _{rc}	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	Semantics Description
			Reference	
α_0	M		Bit string(8)	
α_1	M		Bit string(8)	
α_2	M		Bit string(8)	
α_3	M		Bit string(8)	
β_0	M		Bit string(8)	
β ₁	M		Bit string(8)	
β_2	M		Bit string(8)	
β_3	M		Bit string(8)	

9.2.1.31D GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see [27].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
A ₁	M		Bit string(24)	
A ₀	M		Bit string(32)	
t _{ot}	M		Bit string(8)	
Δt_{LS}	M		Bit string(8)	
WNt	М		Bit string(8)	
WN _{LSF}	M		Bit string(8)	
DN	M		Bit string(8)	
Δt_{LSF}	M		Bit string(8)	

9.2.1.31E GPS Real-Time Integrity

This IE provides the information regarding the status of the GPS constellation. For further details on the meaning of parameters, see [27].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Bad Satellites Presence	M			
>Bad Satellites				
>>Satellite information		1 <maxn< td=""><td></td><td></td></maxn<>		
		oSat>		
>>>BadSatID	M		INTEGER	Satellite ID
			(063)	
>No Bad Satellites			NULL	

Range Bound	Explanation
MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.31F GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see [27].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
WN_a	M		Bit string(8)	
Satellite information	M	1,, <maxno Sat></maxno 		
>SatID	M		INTEGER (063)	Satellite ID
>e	М		Bit string(16)	
>t _{oa}	М		Bit string(8)	
>δi	М		Bit string(16)	
>OMEGADOT	М		Bit string(16)	
>SV Health	М		Bit string(8)	
>A ^{1/2}	М		Bit string(24)	
>OMEGA ₀	М		Bit string(24)	
>M ₀	М		Bit string(24)	
>ω	М		Bit string(24)	
>af ₀	М		Bit string(11)	
>af₁	М		Bit string(11)	

Range Bound	Explanation		
MaxNoSat	Maximum number of satellites for which information can be		
	provided		

9.2.1.31G GPS Receiver Geographical Position (GPS RX Pos)

The GPS Receiver Geographical Position is used to identify the geographical coordinates of a GPS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Latitude Sign	М		ENUMERAT ED (North, South)	
Degrees of Latitude	М		INTEGER (02 ²³ -1)	The IE value (N) is derived by this formula: N≤2 ²³ X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	М		INTEGER (-2 ²³ 2 ²³ -1)	The IE value (N) is derived by this formula: N≤2 ²⁴ X /360 < N+1 X being the longitude in degree (-180°+180°)

9.2.1.32 IB_SG_DATA

Segment as defined in ref. [18].

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
IB_SG_DATA			Bit String	Contains "SIB data fixed" or "SIB data variable" in segment as encoded in ref: [18].

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	Only even positions allowed.
			(0 4094)	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			ENUMERAT	Repetition period for the IB
			ED (4, 8, 16,	segment in frames
			32, 64, 128,	_
			256, 512,	
			1024, 2048,	
			4096)	

9.2.1.35 IB Type

The IB Type identifies a specific system information block.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
IB Type			Enumerated	
			(MIB, SB1,	
			SB2, SIB1,	
			SIB2	
			SIB3, SIB4,	
			SIB5, SIB6,	
			SIB7, SIB8,	
			SIB9, SIB10,	
			SIB11,	
			SIB12,	
			SIB13,	
			SIB13.1	
			SIB13.2,	
			SIB13.3,	
			SIB13.4,	
			SIB14,	
			SIB15,	
			SIB15.1,	
			SIB15.2,	
			SIB15.3,	
			SIB16,,	
			SIB17)	

9.2.1.36 Indication Type

The indication type shall indicate the category of a failure with respect to its impact on the logical resources supported at Node B.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Indication Type			ENUMERAT ED (No Failure, Service Impacting,)	Service Impacting – The failure has impacted on the logical resources supported at Node B.

9.2.1.36A Information Exchange Object Type

The Information Exchange Object type indicates the type of object that the requested information shall be valid for.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Information Exchange Object			ENUMERAT	
Type			ED (Cell,	
)	

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				
>OnDemand			NULL	
>Periodic >>Information Report Periodicity	M		ENUMERAT ED (1min1hr,) step 1min, (1hr24hr,) step 1hr,	The frequency with which the Node B shall send information reports.
>On Modification				
>>Information Threshold	M		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 (0	
			2^20-1)	

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
Information Type Item	M		ENUMERAT ED (GPS Information, DGPS Corrections, GPS RX Pos,)	
GPS Information	C-GPS	0 <maxnogpsite ms=""></maxnogpsite>	,	
> GPS Information Item			ENUMERAT ED (GPS Navigation Model & Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real- Time Integrity,)	

Condition	Explanation
GPS	The IE shall be present if the Information Type Item IE
	indicates "GPS Information".

Range Bound	Explanation
MaxNoGPSItems	Maximum number of GPS Information Items supported in one Information Exchange

9.2.1.36E Information Threshold

The Information Threshold indicates which kind of information shall trigger the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Type Item	М			
>DGPS				
>>PRC Deviation	М		ENUMERAT ED (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
IDDL I II .				
IPDL Indicator			ENUMERAT	
			ED(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 has 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 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(0 26843545 5)	

9.2.1.39 Maximum DL Power Capability

This parameter indicates the maximum DL power capability for a local cell within Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Maximum DL Power Capability			ENUMERAT ED(0500)	dBm, granularity 0.1 dB 0: 0 dBm 1: 0.1 dBm
				 499: 49.9 dBm 500: 50.0 dBm

9.2.1.40 Maximum Transmission Power

Maximum Transmission Power is maximum power for all downlink channels added together, that is allowed to be used simultaneously in a cell. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Maximum transmission Power			ENUMERAT	Unit dBm
			ED(0,500)	
				Granularity 0.1 dB
				0: 0 dBm
				1: 0.1 dBm
				499: 49.9 dBm
				500: 50.0 dBm

9.2.1.40A Measurement Availability Indicator

Indicates if measurement is available or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Measurement Availability			ENUMERATE	
Indicator			D(measureme nt available, measurement not available)	

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			ENUMERAT	
			ED (0, 1, 2,	
			3, 4, 5, 6, 7,	
			8, 9, 11, 13,	
			15, 17, 19,	
)	

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(0	
			2^20-1)	

9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement Increase/Decrease Threshold				
>Received Total Wide Band Power				
>>Received total wide band power	M		INTEGER(0 620)	0: 0 dB 1: 0.1 dB 2: 0.2 dB
>Transmitted Carrier Power				620: 62dB
>>Transmitted Carrier Power	М		INTEGER(0 100)	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(0 126)	0: 0 dB 1: 0.5 dB 2: 1 dB
>SIR				126: 63 dB, [TDD only]
>>SIR >>SIR	M		INTEGER(0 62)	1: 0.5 dB 2: 1 dB
>SIR Error				62: 31dB FDD only
>>SIR Error	M		INTEGER(0 124)	0: 0 dB 1: 0.5 dB 2: 1 dB
>Transmitted Code Power				124: 62 dB
>>Transmitted Code Power	М		INTEGER(0 112,)	0: 0 dB 1: 0.5 dB 2: 1 dB 112: 56 dB
>RSCP				TDD only
>>RSCP	M		INTEGER(0 126)	0: 0 dB 1: 0.5 dB 2: 1 dB
>Round Trip Time				126: 63 dB FDD only
>>Round Trip Time	М		INTEGER(032766)	0: 0 chips 1: 0.0625 chips 2: 0.1250 chips 32766: 2047.875 chips
>Acknowledged PCPCH Access Preambles				FDD only
>>Acknowledged PCPCH Access Preambles	М		INTEGER(0 15,)	According to mapping in [22]
>Detected PCPCH Access Preambles			, ,	FDD only
>>Detected PCPCH Access Preambles	М		INTEGER(0 240,)	According to mapping in [22]

9.2.1.44 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E, F or On Modification.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement				
Threshold				
>Received Total Wide Band				
>>Received total wide band	M		INTEGER(0.	According to mapping in [22] and
power			.621)	[23]
>Transmitted Carrier Power				
>>Transmitted Carrier Power	М		INTEGER(0100)	According to mapping in [22] and [23]
>Acknowledged PRACH				FDD only
Preambles				
>>Acknowledged PRACH Preambles	M		INTEGER(0240,)	According to mapping in [22]
>UL Timeslot ISCP				TDD only
>>UL Timeslot ISCP	М		INTEGER(0127)	According to mapping in [23]
>SIR				
>>SIR	M		INTEGER(063)	According to mapping in [22] and [23]
>SIR Error				FDD only
>>SIR Error	М		INTEGER(0125)	According to mapping in [22]
>Transmitted Code Power				
>>Transmitted Code Power	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				3.84Mcps TDD only
>>Rx Timing Deviation	М		INTEGER(08191)	According to mapping in [23]
>Round Trip Time				FDD only
>>Round Trip Time	М		INTEGER(032767)	According to mapping in [22]
>Acknowledged PCPCH Access Preambles				FDD only
>>Acknowledged PCPCH Access Preambles	М		INTEGER(015,)	According to mapping in [22]
>Detected PCPCH Access Preambles				FDD only
>>Detected PCPCH Access Preambles	М		INTEGER(0240,)	According to mapping in [22]
>UTRAN GPS Timing of Cell Frames for LCS				
>>T _{UTRAN-GPS} Measurement Threshold Information	М		9.2.1.64B	
>SFN-SFN Observed Time Difference				
>>SFN-SFN Measurement Threshold Information	М		9.2.1.53C	

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			ENUMERAT	
			ED(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 occured error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message structure		1 to <maxnoofle vels></maxnoofle 		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 occured error of the message.	GLOBAL	ignore
>IE ID	М		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 hierachical message structure of IEs with assigned criticality above them.	-	

Range bound	Explanation
maxnooflevels	Maximum no. of message levels to report. The value for
	maxnooflevels is 256.

9.2.1.46 Message Type

The Message Type uniquely identifies the message being sent.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Procedure ID	M	1		
	M	1	ENUMERATED (COMMON TRANSPORT CHANNEL SETUP, COMMON TRANSPORT CHANNEL RECONFIGURATION, COMMON TRANSPORT CHANNEL DELETION, BLOCK RESOURCE, UNBLOCK RESOURCE, AUDIT REQUIRED, AUDIT, COMMON MEASUREMENT INITIATION, COMMON MEASUREMENT TERMINATION, COMMON MEASUREMENT TERMINATION, COMMON MEASUREMENT FAILURE, CELL SETUP, CELL RECONFIGURATION, CELL DELETION, RESOURCE STATUS INDICATION, SYSTEM INFORMATION UPDATE, RL SETUP, RL ADDITION, SYNCHRONISED RL RECONFIGURATION COMMIT, SYNCHRONISED RL RECONFIGURATION CANCELLATION, UNSYNCHRONISED RL RECONFIGURATION REDURCE STATUS INDICATION PREPARATION, SYNCHRONISED RL RECONFIGURATION PREPARATION, SYNCHRONISED RL RECONFIGURATION CANCELLATION, UNSYNCHRONISED RL RECONFIGURATION, RL DELETION, DL POWER CONTROL, DL POWER CONTROL, DEDICATED MEASUREMENT INITIATION, DEDICATED MEASUREMENT TERMINATION, DEDICATED MEASUREMENT TERMINATION, DEDICATED MEASUREMENT TERMINATION, DEDICATED MEASUREMENT FAILURE, RL RESTORATION, COMPRESSED MODE COMMAND, ERROR INDICATION, PHYSICAL SHARED CHANNEL RECONFIGURATION, RESET,, INFORMATION EXCHANGE INITIATION, INFORMATION EXCHANGE TERMINATION, INFORMATION EXCHANGE TERMINATION, INFORMATION EXCHANGE FERMINATION, CELL SYNCHRONISATION REPORTING, CELL SYNCHRONISATION TERMINATION, CELL SYNCHRONISATION FERMINATION, CELL SYNCHRONISATI	description
>Ddmode	M		CELL SYNCHRONISATION ADJUSTMENT) ENUMERATED (FDD, TDD, Common,)	Common = common to FDD and TDD.
Type of Message	М		ENUMERATED (Initiating Message, Successful Outcome, Unsuccessful Outcome, Outcome)	

9.2.1.46A Minimum DL Power Capability

This parameter indicates the minimum DL power capability for a local cell within Node B. The reference point is the antenna connector.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Minimum DL Power Capability			ENUMERAT	dBm, granularity 0.1 dB
			ED(0800)	0: -30.0 dBm
			, ,	1: -29.9 dBm
				•••
				799: 49.9 dBm
				800: 50.0 dBm

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)	

9.2.1.47A N_INSYNC_IND

This parameter defines the number of successive in-sync indications after which the Node B shall trigger the Radio Link Restore procedure (see also ref. [10] and [21]).

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
N_INSYNC_IND			Integer (1, 2,, 256)	

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]).

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
N_OUTSYNC_IND			Integer (1, 2,, 256)	

9.2.1.47C Neighbouring FDD Cell Measurement Information

This IE provides information on the FDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UC-Id	М		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 TDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time slot	M		9.2.3.23	
Midamble shift and burst type	M		9.2.3.7	

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			INTEGER	2^20-1 is reserved value to
Context ID			(02^20-1)	indicate 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			ENUMERAT	
Indicator			ED (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.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PICH Power			Enumerated(-10+5dB)	Step 1dB

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)	0: 40% 1: 44 %
				 14: 96% 15: 100% (no puncturing)

9.2.1.50A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
QE-Selector			ENUMERAT	
			ED(selected,	
			non-	
			selected)	

9.2.1.51 Report Characteristics

The report characteristics, defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report				
Characteristics >OnDemand			NII II I	
>OnDemand >Periodic			NULL	
>>Report Periodicity	M		ENUMERAT ED (10ms1mi n,) step 10ms, (1min1hr,) step 1min,	The frequency with which the Node B shall send measurement reports.
>Event A >>Measurement Threshold	M		Measureme	The threshold for which the
			nt Threshold 9.2.1.44	Node B shall trigger a measurement report.
>>Measurement Hysteresis Time	0		ENUMERAT ED (10ms1mi n,) step 10ms,	
>Event B				
>>Measurement Threshold	M		Measureme nt Threshold 9.2.1.44	The threshold for which the Node B shall trigger a measurement report.
>>Measurement Hysteresis Time	0		ENUMERAT ED (10ms1mi n,) step 10ms,	
>Event C				
>>Measurement Increase/Decrease Threshold	M		Measureme nt Increase/De crease Threshold 9.2.1.43	
>>Measurement Change Time	M		ENUMERAT ED (10ms1mi n,) step 10ms,	The time the measurement entity shall rise on (in ms), in order to trigger a measurement report.
>Event D	N 4		M	
>>Measurement Increase/Decrease Threshold	M		Measureme nt Increase/De crease Threshold 9.2.1.43	
>>Measurement Change Time	М		ENUMERAT ED (10ms1mi n,) step 10ms,	The time the measurement entity shall fall (in ms), in order to trigger a measurement report.
>Event E				
>>Measurement Threshold 1	M		Measureme nt Threshold 9.2.1.44	
>>Measurement Threshold 2	0		Measureme nt Threshold 9.2.1.44	
>>Measurement Hysteresis Time	0		ENUMERAT ED (10ms1mi	The hysteresis time in ms

		n,) step	
>>Report Periodicity	0	10ms, ENUMERAT ED (10ms1mi n,) step 10ms, (1min1hr,) step 1min,	The frequency with which the Node B shall send measurement reports.
>Event F			
>>Measurement Threshold 1	M	Measureme nt Threshold 9.2.1.44	
>>Measurement Threshold 2	0	Measureme nt Threshold 9.2.1.44	
>>Measurement Hysteresis Time	0	ENUMERAT ED (10ms1mi n,) step 10ms,	The hysteresis time in ms
>>Report Periodicity	0	ENUMERAT ED (10ms1mi n,) step 10ms, (1min1hr,) step 1min,	The frequency with which the Node B shall send measurement reports.
>On Modification			
>>Measurement Threshold	M	Measureme nt Threshold 9.2.1.44	

9.2.1.51A Requested Data Value

The Requested Data Value IE contains the relevant data concerning the ongoing information exchange.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
DGPS Corrections	0		9.2.1.24B	
GPS Navigation Model &	0		9.2.1.31B	
Time Recovery				
GPS Ionospheric Model	0		9.2.1.31C	
GPS UTC Model	0		9.2.1.31D	
GPS Almanac	0		9.2.1.31F	
GPS Real-Time Integrity	0		9.2.1.31E	
GPS RX Pos	0		9.2.1.31G	

9.2.1.51B Requested Data Value Information

The *Requested Data Value Information* IE provides information both on whether or not the Requested Data Value is provided in the message or not and if provided also the Requested Data Value itself. In case of periodic reporting, 'Information Not Available' shall be used when at least one part of the requested information was not available at the moment of initiating the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Information Availability Indicator	М				1	
>Information Available					-	
>>Requested Data Value	М		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			ENUMERAT ED(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.

9.2.1.53 RL ID

The RL ID is the unique identifier for one RL associated with a UE.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RL ID			INTEGER	
			(031)	

9.2.1.53a RNC-Id

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RNC-Id			INTEGER	
			(04095)	

9.2.1.53A SFN

System Frame Number of the cell, see ref. [17].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SFN			Integer	
			(04095)	

9.2.1.53B Segment type

Segment type as defined in [18].

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Segment type			Enumerated(
			First	
			segment,	
			First	
			segment	
			short,	
			Subsequent	
			segment,	
			Last	
			segment,	
			Last	
			segment	
			short,	
			Complete	
			SIB,	
			Complete	
			SIB short,)	

9.2.1.53C SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SFN-SFN Change Limit	0		INTEGER(1. .16384)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted SFN-SFN Deviation Limit	0		INTEGER(1. .16384)	Deviation of the predicated SFN-SFN from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.2.1.53D SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE type and reference	Semantics description
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 Primary CPICH Time Slot of the reference cell at which this measurement has been performed (FDD Only).
				Indicates the Time Slot of the reference cell at which this measurement has been performed (TDD Only).

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 <maxnomeasn Cell></maxnomeasn 		
>UC-ld	М		9.2.1.65B	
>SFN-SFN	М		INTEGER(0. . 40961)	According to mapping in [22]. TBD by RAN4.
>SFN-SFN Quality	M		INTEGER(0. .16383)	Indicates the standard deviation of the SFN-SFN measurements.
>SFN-SFN Drift Rate	М		INTEGER(- 16383+163 83)	Indicates the SFN-SFN drift rate in 1/16 chip per second. A positive value indicates that the Referece cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	М		INTEGER(0. . 16383)	Indicates the standard deviation of the SFN-SFN drift rate measurements.
>SFN-SFN Measurement Time Stamp	М		9.2.1.53D	
Unsuccessful Neighbouring cell SFN- SFN Observed Time Difference Measurement Information		0 <maxnomeasn Cell-1></maxnomeasn 		
>UC-Id	M		9.2.1.65B	

Range bound	Explanation		
maxnoMeasNCell	Maximum number of neighbouring cells that can be		
	measured on.		

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,)	

9.2.1.56 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(1. .3600)	Value in seconds

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			ENUMERAT	In seconds
			ED (0, 0.1,	
			0.2,, 25.5)	

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			ENUMERAT	
Indicator			ED(start of	
			audit	
			sequence,	
			not start of	
			audit	
			sequence)	

9.2.1.57 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. In TDD if it is present in the timeslot, it will be included within the first Channelization code listed.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TFCI presence			ENUMERAT	
			ED (Present,	
			not present)	

9.2.1.58 TFCS (Transport Format Combination Set)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. The process continues in the same way for the

following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2)]

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE DSCH			101010100	
>No split in TFCI				This choice is made if: a) The TFCS refers to the uplink OR b) The mode is FDD and none of the Node B communication contexts are assigned any DSCH transport channels OR c) The mode is TDD
>>TFCS		1 to <maxnooftfcs></maxnooftfcs>		The first instance of the parameter corresponds to TFC zero, the second to 1 and so on.
>>>CTFC	М		INTEGER(0. .MaxCTFC)	Integer number calculated according to [18]
>>>CHOICE Gain Factors	C- PhysChan			
>>>Signalled Gain Factors				
>>>>CHOICE mode				
>>>>FDD	N4		later	For III DDCCII
>>>>>Gain Factor β _C	M		Integer (015)	For UL DPCCH or control part of PRACH or control part of PCPCH in FDD; mapping in accordance to [9]
>>>>>Gain Factor β _D	M		Integer (015)	For UL DPDCH or data part of PRACH or data part of PCPCH in FDD: mapping in accordance to [9]
>>>>TDD				
>>>>Gain Factor β	М		Integer (015)	For UL DPCH in TDD; mapping in accordance to [20]
>>>>Reference TFC nr	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
>There is a split in the TFCI				This choice is made if: a) The TFCS refers to the downlink AND b) The mode is FDD and one of the Node B communication contexts is assigned one or more DSCH transport channels
>>Transport format combination_DCH		1 to <maxtfci_1_co mbs></maxtfci_1_co 		The first instance of the parameter <i>Transport format</i> combination_DCH corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	М		Integer(0M axCTFC)	Integer number calculated according to [18]. The calculation of CTFC ignores any DSCH transport channels which may be assigned
>>Choice Signalling method				, <u>, , , , , , , , , , , , , , , , , , </u>
>>>TFCI range				
>>>>TFC mapping on DSCH		1 to <maxnotfcigrou ps></maxnotfcigrou 		

>>>>Max TFCI(field2) value	M		Integer(110 23)	This is the Maximum value in the range of TFCI(field2) values for which the specified CTFC(field2) applies
>>>>CTFC(field2)	М		Integer(0M axCTFC)	Integer number calculated according to [18]. The calculation of CTFC ignores any DCH transport channels which may be assigned
>>>Explicit				
>>>>Transport format combination_DSCH		1 to <maxtfci_2_co mbs></maxtfci_2_co 		The first instance of the parameter <i>Transport format combination_DSCH</i> corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>CTFC(field2)	М		Integer(0M axCTFC)	Integer number calculated according to [18]. The calculation of CTFC ignores any DCH transport channels which may be assigned

Condition	Explanation
PhysChan	The IE shall be present if the TFCS concerns a UL DPCH or PRACH
	channel [FDD – PCPCH channel].

Range bound	Explanation
MaxnoofTFCs	The maximum number of Transport Format Combinations.
MaxTFCI_1_Combs	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
MaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
MaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
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]

9.2.1.59 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Dynamic Transport Format Information		1 to <maxtfcount></maxtfcount>		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport blocks	М		INTEGER (0512)	
>Transport Block Size	C – Blocks		INTEGER (05000)	Bits
>CHOICE mode	M			
>>TDD				
>>>Transmission	C-	1 to		
Time interval	TTIdynami	<maxtticount></maxtticount>		
Information	С			
>>>>Transmission	М		Enumerated(10,	ms
time interval			20, 40, 80,)	
Semi-static Transport Format Information		1		
>Transmission time interval	M		ENUMERATED (10, 20, 40, 80, dynamic,,5)	ms; Value "dynamic" for TDD only; Value "5" for LCR TDD only
>Type of channel coding	M		ENUMERATED (No coding, Convolutional, Turbo,)	
>Coding Rate	C – Coding		ENUMERATED (1/2, 1/3,)	
>Rate matching attribute	М		INTEGER (1maxRM)	
>CRC size	М		ENUMERATED (0, 8, 12, 16, 24,)	
>CHOICE mode	M			
>>TDD				
>>>2 nd interleaving mode	M		Enumerated(Fra me related, Timeslot related,)	

Condition	Explanation
Blocks	The IE shall be present if the Number of Transport Blocks IE is set to
	a value greater than 0.
Coding	The IE shall be present if the Type of channel coding IE is set to
	"Convolutional" or "Turbo".
TTIdynamic	The IE shall be present if the Transmission Time Interval IE in the
	Semi-static Transport Format Information IE is set to "dynamic".

Range bound	Explanation
MaxTFcount	Maximum number of different transport formats that can be included
	in the Transport format set for one transport channel.
MaxRM	Maximum number that could be set as rate matching attribute for a
	transport channel.
MaxTTlcount	The amount of different TTI 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	ms.
			(02559)	

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	Semantics description
			reference	
ToAWS			INTEGER	ms.
			(01279)	

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	Semantics description
			reference	
Transaction ID			CHOICE	
			INTEGER	
			(0127) or	
			ÌNTEGÉR	
			(032767)	

9.2.1.62A Transport Bearer Request Indicator

Indicates whether a new transport bearer needs to be established for carrying the concerning transport channel.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Transport Bearer Request			ENUMERAT	
Indicator			ED(Bearer	
			Requested,	
			Bearer not	
			Requested,	
)	

9.2.1.63 Transport Layer Address

Transport Layer Address defines the transport address of the Node B. For details on the Transport Address used see ref. [2].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Transport Layer Address			Bit string(1 160,)	

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			ENUMERAT	
			ED(active,	
			inactive)	

9.2.1.64A T_{UTRAN-GPS} Measurement Value Information

The $T_{UTRAN-GPS}$ Measurement Value Information IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frame for LCS measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
T _{UTRAN-GPS}	M		INTEGER(0.	Indicates the UTRAN GPS Timing of Cell Frame for LCS. According to mapping in [22].
Tutran-gps Quality	М		INTEGER(0. .2^20-1)	Indicates the standard deviation of the T _{UTRAN-GPS} measurements.
T _{UTRAN-GPS} Drift Rate	M		INTEGER(- 2^14+1+2^ 14-1)	Indicates the T _{UTRAN-GPS} drift rate in 1/16 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
T _{UTRAN-GPS} Drift Rate Quality	М		INTEGER(0. .2^14-1)	Indicates the standard deviation of the T _{UTRAN-GPS} drift rate measurements.

9.2.1.64B T_{UTRAN-GPS} Measurement Threshold Information

The $T_{UTRAN-GPS}$ Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frame for LCS measurements shall shall trigger the event On Modification.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
T _{UTRAN-GPS} Change Limit	0		INTEGER(1. .2^20)	Change of T _{UTRAN-GPS} value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T _{UTRAN-GPS} Deviation Limit	0		INTEGER(1. .2^20)	Deviation of the predicated T _{UTRAN-GPS} from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.2.1.64C T_{UTRAN-GPS} Accuracy Class

The $T_{UTRAN\text{-}GPS}$ Accuracy Class IE indicates the accuracy class of the UTRAN GPS Timing of Cell Frame for LCS measurement.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
T _{UTRAN-GPS} Accuracy Class			ENUMERAT	More information about
			ED(Accuracy	T _{UTRAN-GPS} Measurement
			Class A,	Accuracy Class is included in
			Accuracy	[22].
			Class B,	
			Accuracy	
			Class C,)	

9.2.1.65 UARFCN

Designate the central frequency of the channel number.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER (016383,)	corresponds to 0.0Hz 3276.6MHz (subclause 5.4.3 in [14] and [15])

9.2.1.65A UL Capacity Credit

The capacity credit indicates to the CRNC the Uplink capacity of a Local Cell or a Local Cell Group.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL Capacity Credit			INTEGER	
			(065535)	

9.2.1.65B UTRAN Cell Identifier (UC-Id)

The UC-Id (UTRAN Cell identifier) is the identifier of a cell in one UTRAN.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RNC-Id	М		9.2.1.53a	
C-Id	М		9.2.1.9	

9.2.1.66 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL FP Mode				
			ENUMERAT	
			ED (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			ENUMERAT	Step 0.1 dB
			ED (-8.2	·
			17.3)	

9.2.2 FDD specific parameters

9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CM Configuration Change CFN	М		CFN 9.2.1.7	
Transmission Gap Pattern Sequence Status		0 to <maxtgps></maxtgps>		
>TGPSI Identifier	M		Integer(1< MaxTGPS>)	If the group is not present, none of the pattern sequences are activated. References an already defined sequence.
>TGPRC	M		Integer (0511)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. 0=Infinity
>TGCFN	M		CFN 9.2.1.7	Connection Frame Number of the first frame of the first pattern within the Transmission Gap Pattern Sequence.

Range bound	Explanation
MaxTGPS	Maximum number of active pattern sequences. Value 6.

9.2.2.B Adjustment Period

Adjustment Period IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Adjustment Period			INTEGER (1 256)	Frames

9.2.2.C Adjustment Ratio

Adjustment Ratio IE (Radj) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Adjustment Ratio			INTEGER (0 100)	The Adjustment Ratio is given with a granularity of 0.01 0 -> 0.00 1 -> 0.01 100 -> 1.00

9.2.2.D AICH Power

The AICH Power IE indicates a power level relative to the primary CPICH power configured in a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
AICH Power			Integer(- 22+5)	Offset in dB

9.2.2.1 AICH Transmission Timing

	IE/Group Name	Presence	Range	IE type and reference	Semantics description
ĺ	AICH Transmission Timing			ENUMERAT	See parameter
	_			ED (0, 1)	AICH_Transmission_Timing in
					ref. [7].

9.2.2.1A AP Preamble Signature

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
AP Preamble Signature			INTEGER (015)	Described in ref. [9]

9.2.2.1B AP Sub Channel Number

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
AP Sub Channel Number			INTEGER (011)	Described in ref. [10]

9.2.2.1C CD Sub Channel Numbers

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
CD Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4. See also [10].

9.2.2.1D Channel Assignment Indication

The Channel Assingment Indication indicates whether CA is active or inactive. When CA is active, CPCH is in Versatile Channel Assingment Method (VCAM) mode and when CA is inactive, CPCH is in UE Channel Selection Method (UCSM) mode. In VCAM mode (CA active), CA message in CD/CA-ICH shall be sent.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Channel Assignment			ENUMERAT	
Indication			ED (CA	
			Active, CA	
			Inactive)	

9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset for the DL DPCH relative to the Primary CPICH timing.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Chip Offset			INTEGER	Chips
			(038399)	

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.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Closed Loop Timing Adjustment Mode			ENUMERAT ED (Offset1, Offset2,)	According to ref. [10] subclause 7.1: 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

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	Semantics description
			reference	
Compressed Mode			ENUMERAT	
Deactivation flag			ED(Deactiva	
			te,	
			Maintain	
			Active)	

9.2.2.4 Compressed Mode Method

Void.

9.2.2.4A CPCH Allowed Total Rate

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CPCH Allowed Total Rate			ENUMERAT ED (15, 30, 60, 120, 240, 480, 960, 1920, 2880, 3840, 4800, 5760,)	Channel Symbol Rate (ksps)

9.2.2.4B CPCH Scrambling Code Number

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
CPCH Scrambling Code Number			INTEGER (079)	Described in ref. [9]

9.2.2.4C CPCH UL DPCCH Slot Format

Indicates the slot format used in UL CPCH message control part, accordingly to ref. [7]

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CPCH UL DPCCH slot			INTEGER	
format			(02,)	

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 s	Criticality	Assigned Criticality
DCH FDD Information		1 to <maxnoof DCHs></maxnoof 			I	
>Payload CRC Presence Indicator	М		9.2.1.49		1	
>UL FP mode	M		9.2.1.66		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	M		9.2.1.60		_	
>DCH Specific Info		1 <maxno ofDCHs></maxno 			_	
>>DCH ID	M		9.2.1.20		_	
>>Transport Format Set	M		9.2.1.59	For UL	_	
>>Transport Format Set	M		9.2.1.59	For DL	_	
>>Allocation/Retention Priority	М		9.2.1.1A		-	
>>Frame Handling Priority	М		9.2.1.30		_	
>>QE-Selector	M		9.2.1.50A		_	

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 s	Criticality	Assigned Criticality
DCHs FDD to Modify		1 <max noofDC Hs></max 			_	
>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 <max noofDC Hs></max 			_	
>>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		9.2.1.20		_	

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for one UE.

9.2.2.5 D-Field Length

Void.

9.2.2.6 Dedicated Channels Capacity Consumption Law

Void

9.2.2.7 Diversity Control Field

Void.

9.2.2.8 Diversity Indication

Void.

9.2.2.9 Diversity mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Diversity Mode			ENUMERAT	
			ED(None,	
			STTD,	
			Closed loop	
			mode 1,	
			Closed loop	
			mode2,)	

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,)	

9.2.2.11 DL frame type

Void.

9.2.2.12 DL or Global Capacity Credit

Void

9.2.2.12A DL_power_averaging_window_size

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	Semantics description
			reference	
DL_power_averaging_window_size			INTEGER	1-60 inner loop power
			(160)	adjustments, step size 1
				adjustment

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
				115= 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(0.	
			30,)	

9.2.2.13B DSCH FDD Information

The DSCH FDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE type and reference	Semantics descriptions	Criticalit y	Assigned Criticality
DSCH FDD Information		1 to <maxnoof DSCHs></maxnoof 			_	
>DSCH ID	M		9.2.1.27		_	
>Transport Format Set	M		9.2.1.59	For DSCH	_	
>Allocation/Retention Priority	М		9.2.1.1A		_	
>Frame Handling Priority	M		9.2.1.30		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	M		9.2.1.60		_	

Range bound	Explanation
MaxnoofDSCHs	Maximum number of DSCHs for one UE.

9.2.2.13C DPC Mode

The DPC Mode IE indicates the DPC mode to be applied [10].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DPC Mode			ENUMERAT TED (Mode0, Mode1,)	Mode0: The Node B shall estimate the UE transmitted TPC command and update the DL power in every slot
				Mode1: The Node B shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots

9.2.2.13D DSCH FDD Common Information

The DSCH Common Information includes common information for all DSCHs for one UE.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Enhanced DSCH PC Indicator	0		9.2.2.13G		_	
Enhanced DSCH PC	C- EDSCHPC On		9.2.2.13E		_	

Condition	Explanation
EDSCHPCOn	The IE shall be present if the Enhanced DSCH PC
	Indicator IE is set to "Enhanced DSCH PC Active in
	the UE".

9.2.2.13E Enhanced DSCH PC

The Enhanced DSCH PC includes all the parameters which are needed for DSCH power control improvement during soft handover.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Enhanced DSCH PC Wnd	M		9.2.2.13H	
Enhanced DSCH PC Counter	M		9.2.2.13F	
Enhanced DSCH Power Offset	M		9.2.2.13l	

9.2.2.13F Enhanced DSCH PC Counter

The Enhanced DSCH PC Counter parameter gives the number of correct cell ID command to receive in the averaging window, *Enhance DSCH PC Wnd* IE, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Enhanced DSCH PC			INTEGER(1.	
Counter			.50)	

9.2.2.13G Enhanced DSCH PC Indicator

The Enhanced DSCH PC Indicator indicates whether Enhanced DSCH PC is in use by the UE or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Enhanced DSCH PC Indicator			ENUMERAT ED(Enhance d DSCH PC Active in the UE, Enhanced	
			DSCH PC not Active in the UE)	

9.2.2.13H Enhanced DSCH PC Wnd

The Enhanced DSCH PC Wnd parameter shows the window size to decide primary or non-primary cell, see ref. [10] subclause 5.2.2.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Enhanced DSCH PC Wnd			INTEGER(1.	
			.10)	

9.2.2.13I Enhanced DSCH Power Offset

The Enhanced DSCH Power Offset parameter gives the power offset to be added on DSCH when cell is decided to be primary.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Enhanced DSCH Power Offset			INTEGER(- 150)	Unit dB, step 1 dB

9.2.2.14 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
FDD DL ChannelisationCode Number			INTEGER(0 511)	According to the mapping in [9]. The maximum value is equal to the DL spreading factor –1

9.2.2.14A FDD DL Code Information

The FDD DL Code Information IE provides DL Code information for the RL.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
		1 10	reference	S		
FDD DL Code Information		1 to			_	
		<maxnoof-< td=""><td></td><td></td><td></td><td></td></maxnoof-<>				
		DLCodes				
>DL Scrambling Code	М		9.2.2.13		_	
>FDD DL Channelisation	М		9.2.2.14		_	
Code Number						
>Transmission Gap	0		9.2.2.53B		_	
Pattern Sequence Code						
Information						

Range bound	Explanation
MaxnoofDLCodes	Maximum number of DL code information.

9.2.2.15 FDD SCCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
FDD SCCPCH Offset			INTEGER(0 149)	0: 0 chip 1: 256 chip 2: 512 chip 149: 38144 chip [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			ENUMERAT	
·			ED (0.5, 1,	
			1.5, 2,)	ļ

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	Semantics description
			reference	
First RLS Indicator			ENUMERAT	
			ED (first	
			RLS, not first	
			RLS)	

9.2.2.17 Gap Period

Void.

9.2.2.18 Gap Position Mode

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, Node B shall use the limited power increase algorithm as specified in [10], subclause 5.2.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Limited Power Increase			ENUMERAT	
			ED(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			ENUMERAT	
			ED(Active,	
			Inactive)	

9.2.2.18C IPDL FDD Parameters

The IPDL FDD Parameters IE provides information about IPDL to be applied for FDD when activated.

IE/Group Name	Presence	Range	IE type and	Semantics description	Criticality	Assigned Criticality
			reference	S		
IP spacingFDD	M		ENUMERA TED (5,7,10,15, 20,30,40,5 0)	See [10]	1	
IP length	М		ENUMERA TED (5,10)	See [10]	ı	
Seed	M		INTEGER (063)	See [10]	1	
Burst mode parameters	0		9.2.1.5A			

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	Slots
			(1 10)	

9.2.2.20A Max Number of PCPCHes

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Max Number of PCPCHes			INTEGER(164,)	

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)	

9.2.2.22 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			ENUMERAT	
length			ED(4,8,16,	
			32,64,128,	
			256)	

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			ENUMERAT	
			ED(Fixed,	
			Flexible)	

9.2.2.23A N_EOT

The N_EOT is defined as number of End of Transmission for release of PCPCH transmission.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
N_EOT			INTEGER	TTI
			(08)	

9.2.2.23B NF_max

The NF_max is defined as maximum number of Frame in a PCPCH message data part.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
NF_max			INTEGER	
			(164,)	

9.2.2.23C N_Start_Message

The N_Start_Message is defined as number of Frames for start message of DL DPDCHes for a CPCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
N_Start_Message			INTEGER	
			(18)	

9.2.2.24 Pattern Duration (PD)

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PD			INTEGER(02047,)	Frames If the value is set to '0', the Pattern Duration shall be interpreted as 'infinite'

9.2.2.24A PCP Length

Indicates CPCH power control preamble length.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PCP Length			ENUMERAT ED(0,8)	

9.2.2.25 PDSCH code mapping

This IE indicates the association between each possible value of TFCI(field 2) and the corresponding PDSCH channelisation code(s). There are three fundamentally different ways that the UTRAN must choose between in order to signal the mapping information, these are described below. The signalling capacity consumed by the different methods will vary depending on the way in which the UTRAN configures usage of the DSCH. A fourth option is also provided which allows the UTRAN to replace individual entries in the TFCI(field 2) to PDSCH code mapping table with new PDSCH code values.

Method #1 - Using code range

The mapping is described in terms of a number of groups, each group associated with a given spreading factor. The UE maps TFCI(field2) values to PDSCH codes in the following way. The PDSCH code used for TFCI(field 2) = 0, is given by the SF and code number = 'PDSCH code start' of Group = 1. The PDSCH code used for TFCI(field 2) = 1, is given by the SF and code number = 'PDSCH code start' + 1. This continues, with unit increments in the value of TFC mapping to unit increments in code number up until the point that code number = 'PDSCH code stop'. The process continues in the same way for the next group with the TFCI(field 2) value used by the UE when constructing its mapping table starting at the largest value reached in the previous group plus one. In the event that 'PDSCH code start' = 'PDSCH code stop' (as may occur when mapping the PDSCH root code to a TFCI (field 2) value) then this is to be interpreted as defining the mapping between the channelisation code and a single TFCI (ie. TFCI(field 2) should not be incremented twice).

Note that each value of TFCI (field 2) maps to a given code number and when the 'multi-code info' parameter is greater than 1, then each value of TFCI (field 2) actually maps to a set of PDSCH codes. In this case contiguous codes are assigned, starting at the channelisation code denoted by the 'code number' parameter and including all codes with code numbers up to and including 'code number' - 1 + the value given in the parameter 'multi-code info'.

Method #2 - Using TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given PDSCH channelisation code or codes for multicode. The PDSCH code specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2)'. The PDSCH code specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2)' in the second group. The process continues in the same way for the following groups with the TFCI(field 2) value starting at the largest value reached in the previous group plus one.

Method #3 - Explicit

The mapping between TFCI(field 2) value and PDSCH channelisation code is spelt out explicitly for each value of TFCI (field2).

Information Element/Group name	Presence	Range	IE type and reference	Semantics description
DL Scrambling Code	M		INTEGER	Scrambling code on which

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	(015)	PDSCH is transmitted.
	,	0= Primary scrambling code of
		the cell
		115 = Secondary
		scrambling code

Choice signalling method				
>code range				
>>PDSCH code mapping		1 to <maxnoco< td=""><td></td><td></td></maxnoco<>		
>>>Spreading factor	M	deGroups>	Enumerated(4, 8, 16, 32, 64, 128, 256)	
>>>multi-code info	М		Integer(116	This parameter indicates the number of PDSCH transmitted to the UE. The PDSCH codes all have the same SF as denoted by the Spreading factor parameter. Contiguous codes are assigned, starting at the channelisation code denoted by the spreading factor and code number parameter and including all codes, with code numbers up to and including 'code number' - 1 + 'multi-code info'. Note that 'code number'-1+'multi-code info' will not be allowed to exceed 'maxCodeNumComp'-1
>>>Code number	М		Integer(0m axCodeNum Comp-1)	PDSCH code start, Numbering as described in [18]
>>>Code number	M		Integer(0m axCodeNum Comp-1)	PDSCH code stop, Numbering as described in [18]
>TFCI range				
>>DSCH mapping		1 to <maxnotf CIGroups></maxnotf 		
>>>Max TFCI(field2) value	M		Integer(110 23)	This is the maximum value in the range of TFCI(field 2) values for which the specified PDSCH code applies
>>>Spreading factor	М		Enumerated(4, 8, 16, 32, 64, 128, 256)	SF of PDSCH code
>>>multi-code info	М		Integer(116)	Semantics as described for this parameter above
>>>Code number	M		Integer(0m axCodeNum Comp-1)	Code number of PDSCH code. Numbering as described in [18]
>Explicit				
>>PDSCH code		1 to MaxTFCI_ 2_Combs		The first instance of the parameter PDSCH code corresponds to TFCI (field2) = 0, the second to TFCI(field 2) = 1 and so on.
>>>Spreading factor	M		Enumerated(4, 8, 16, 32, 64, 128, 256)	SF of PDSCH code
>>>multi-code info	М		Integer(116	Semantics as described for this parameter above
>>>Code number	M		Integer(0m axCodeNum Comp-1)	Code number of PDSCH code. Numbering as described in [18]

Range Bound	Explanation
MaxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree.
MaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI field 2)
MaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single PDSCH code applies.
MaxNoCodeGroups	Maximum number of groups, each group described in terms of a range of PDSCH channelisation code values for which a single spreading factor applies.

9.2.2.26 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PICH Mode			Enumerated(18, 36, 72, 144)	Number of PI per frame

9.2.2.27 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Power Adjustment Type			ENUMERAT	
			ED (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 DPCH or a Secondary CCPCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Power Offset			INTEGER	Step 0.25 dB, range 0-6 dB
			(024)	

9.2.2.29A Power_Raise_Limit

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Power_Raise_Limit			INTEGER (010)	0-10 dB, step size 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.

Information Element/Group	Presence	Range	IE type and	Semantics description
Name			reference	
Preamble Threshold			INTEGER	0: - 36.0 dB
			(0 , 1,,72)	1: - 35.5 dB
				2: - 35.0 dB
				72: 0.0 dB

9.2.2.33 Primary CPICH Power

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.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Primary CPICH power			Enumerated (-10,, 50)	Unit dBm Granularity 0.1 dB
				Grandianty 0.1 dB

9.2.2.34 Primary Scrambling code

The Primary scrambling code to be used in the cell.

Presence	Range	IE type and reference	Semantics description
		Integer (0	
		511)	
	riesence	riesence Kange	reference Integer (0

9.2.2.35 Propagation Delay

Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Propagation Delay			INTEGER	Chips. Step size is 3 chips.
			(0255)	0=0 chips,
				1=3 chips,

9.2.2.36 QE-Selector

Void.

9.2.2.37 RACH Slot Format

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RACH Slot Format			ENUMERAT ED(03,)	See ref. [7].

9.2.2.38 RACH sub Channel numbers

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RACH Sub Channel Numbers			BIT STRING (12)	Each bit indicates availability for a subchannel, where the subchannels are numbered "subchannel 0" to "subchannel 11". The value 1 of a bit indicates that the corresponding subchannel is available and the value 0 indicates that it is not available. The order of bits is to be interpreted according to subclause 9.3.4.

9.2.2.39 RL Set ID

The RL Set ID uniquely identifies one RL Set within a Node B Communication Context.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RL Set ID			INTEGER	
			(031)	

9.2.2.39A Received total wide band power

The Received total wide band power indicates the UL interference at a certain cell under CRNC, see ref. [4].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Received total wide band			INTEGER(0.	According to mapping in [22].
power			.621)	

9.2.2.40 S-Field Length

The UE uses the S Field of the UL DPCCH slot to send the SSDT Cell ID to the network.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
S Field Length			ENUMERAT	
			ED (1, 2,)	ļ

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 Word 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 Format			INTEGER(017,)	

9.2.2.44 SSDT Cell Identity

The SSDT Cell ID is a temporary ID for SSDT assigned to a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SSDT Cell Identity			ENUMERAT	
			ED (a, b, h)	

9.2.2.44A SSDT Cell Identity for EDSCHPC

The SSDT Cell Identity for EDSCHPC is a temporary ID for enhanced DSCH power control assigned to a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SSDT Cell Identity for			SSDT Cell	
EDSCHPC			Identity	
			9.2.2.44	

9.2.2.45 SSDT Cell ID Length

The SSDT Cell ID Length parameter shows the length of the SSDT Cell ID.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell ID Length			ENUMERAT	
· ·			ED(Short,	
			Medium,	
			Long)	

9.2.2.46 SSDT Support Indicator

The SSDT Support Indicator indicates whether a RL supports SSDT or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SSDT Support Indicator			ENUMERAT	
			ED (SSDT	
			Supported,	
			SSDT not	
			supported).	

9.2.2.47 SSDT Indication

The SSDT Indication indicates whether SSDT is in use by the UE or not.

IE/Group name	Presence	Range	IE type and reference	Semantics description
SSDT Indication			ENUMERAT ED(SSDT Active in the	
			UE, SSDT not Active in the UE)	

9.2.2.48 STTD Indicator

Indicates if STTD shall be active or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
STTD Indicator			ENUMERAT ED(active, inactive)	

9.2.2.49 T Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
T Cell			Enumerated	0: 0 chip
			(0 , 1,,9)	1: 256 chip
				9: 2304 chip
				[17]

9.2.2.49A TFCI2 Bearer Information Response

The *TFC12 Bearer Information Response* IE provides information for TFC12 bearer that have been established or modified.

IE/Group Name	Presence	Range	IE type and reference	Semantics description s	Criticality	Assigned Criticality
Binding ID	M		9.2.1.4		-	
Transport Layer Address	M		9.2.1.63		-	

9.2.2.50 TFCI signalling mode

This parameter indicates if the normal or split mode is used for the TFCI. In the event that the split mode is to be used then the IE indicates whether the split is 'Hard' or 'Logical', and in the event that the split is 'Logical' the IE indicates the number of bits in TFCI (field 2).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TFCI signalling option	М		ENUMERAT ED (Normal, Split)	'Normal' : meaning no split in the TFCI field (either 'Logical' or 'Hard') 'Split' : meaning there is a split in the TFCI field (either 'Logical' or 'Hard')
Split type	C-IfSplit		Enumerated (Hard, Logical)	'Hard': meaning that TFCI (field 1) and TFCI (field 2) are each 5 bits long and each field is block coded separately. 'Logical': meaning that on the physical layer TFCI (field 1) and TFCI (field 2) are concatenated, field 1 taking the most significant bits and field 2 taking the least significant bits). The whole is then encoded with a single block code.
Length of TFCl2	C- SplitType		Integer (110)	This IE indicates the length measured in number of bits of TFCI (field2).

Condition	Explanation
IfSplit	The IE shall be present if the <i>TFCI</i> signalling option IE is set to "Split".
SplitType	The IE shall be present if the Split type IE is set to "Logical".

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			ENUMERAT ED(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 to <maxtgps></maxtgps>		
>TGPSI Identifier	M		Integer(1< MaxTGPS>)	Transmission Gap Pattern Sequence Identifier Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be used.</maxtgps>
>TGSN	M		Integer (014)	Transmission Gap Starting Slot Number The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		Integer(114	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	0		Integer (114)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		Integer (0, 15 269)	Transmission gap distance indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to 0 (0 = undefined).
>TGPL1	М		Integer (1144,)	The duration of transmission gap pattern 1 in frames.
>TGPL2	0		Integer (1144,)	The duration of transmission gap pattern 2 in frames. If omitted, then TGPL2=TGPL1.
>UL/DL mode	М		Enumerated (UL only, DL only, UL/DL)	Defines whether only DL, only UL, or combined UL/DL compressed mode is used.
>Downlink compressed mode method	C-DL		Enumerated (puncturing, SF/2, higher layer scheduling,)	Method for generating downlink compressed mode gap None means that compressed mode pattern is stopped.
>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 UL 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)
>DeltaSIRafter1	M		Integer	Step 0.1 dB, Range 0-3dB Delta in UL SIR target value to

		(030)	be set in the Node B one frame after the frame containing the start of the first transmission gap in the transmission gap pattern,. Step 0.1 dB, Range 0-3dB
>DeltaSIR2	0	Integer (030)	Delta in UL 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. Step 0.1 dB, Range 0-3dB
>DeltaSIRafter2	0	Integer (030)	Delta in UL 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. Step 0.1 dB, Range 0-3dB

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 [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Scrambling code change			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, accordingly to ref. [7].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL DPCCH slot format			INTEGER (05,)	

9.2.2.58 UL SIR

Void

9.2.2.59 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL scrambling code number	М		INTEGER (0 2 ²⁴ -1)	
UL scrambling code length	М		ENUMERAT ED(Short, Long)	

9.2.2.60 UL Capacity Credit

Void

9.2.3 TDD specific Parameters

9.2.3.1 Block STTD Indicator

Indicates if Block STTD antenna diversity is applied or not to the PCCPCH.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Block STTD Indicator			ENUMERAT ED(active, inactive)	

9.2.3.2 Burst Type

Void.

9.2.3.3 CCTrCH ID

The CCTrCH ID identifies unambiguously a CCTrCH inside a Radio Link.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CCTrCH ID			INTEGER	
			(015)	

9.2.3.4 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the Code Groups, Scrambling Codes, Midambles and Toffset (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 Granularity 1 dB.

9.2.3.4B DL Timeslot ISCP

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 s	Criticality	Assigned Criticality
DCH TDD Information		1 to <maxnoof DCHs></maxnoof 			_	
>Payload CRC Presence Indicator	M		9.2.1.49		_	
>UL FP mode	M		9.2.1.66		_	
>ToAWS	M		9.2.1.61		_	
>ToAWE	M		9.2.1.60		_	
>DCH Specific Info		1 <maxno ofDCHs></maxno 			_	
>>DCH ID	M		9.2.1.20		_	
>>CCTrCH ID	М		9.2.3.3	UL CCTrCH in which the DCH is mapped	-	
>>CCTrCH ID	M		9.2.3.3	DL CCTrCH in which the DCH is mapped	_	
>>Transport Format Set	M		9.2.1.59	For UL	_	
>>Transport Format Set	M		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		_	

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 s	Criticality	Assigned Criticality
DCHs TDD to Modify		1 <maxn oofDCHs ></maxn 			GLOBAL	reject
>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 <maxn oofDCHs ></maxn 			_	
>>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		_	

\Range bound	Explanation			
MaxnoofDCHs	Maximum number of DCHs for one UE			

9.2.3.4E DL Timeslot Information

The *DL Timeslot Information* IE provides information for DL Time slot to be established.

IE/Group Name	Presence	Range	IE type and reference	Semantics description s	Criticality	Assigned Criticality
DL Timeslot Information		1 <maxnoof DLts></maxnoof 			_	
>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	М		TDD DL Code Information 9.2.3.19B		_	

Range bound	Explanation		
MaxnoofDLts	Maximum number of Downlink time slots per Radio Link		

9.2.3.4F DL Time Slot ISCP Info

The DL Time Slot ISCP Info IE provides information for DL Interference level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE type and reference	Semantics description s	Criticality	Assigned Criticality
DL Time Slot ISCP Info		1 <maxnoofdl ts></maxnoofdl 			1	
>Time Slot	M		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 sync burst measurement per Node B - control port.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CSB Measurement ID			Integer(0	
			65535)	

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 sync burst transmission/measurement is repeated. This means that if the Time Slot K is assigned to the cell sync burst transmission/measurements in the Radio Frame J, the cell sync burst transmission/measurement is also in all the Radio Frames J+n*Repetition Period.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Cell Sync Burst Repetition			INTEGER	
Period			(04095)	

9.2.3.4K Cell Sync Burst SIR

Indicates the Signal to Interference Ratio of the cell sync burst measurement according definition in [5].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Sync Burst SIR				According to mapping in [23]
			(031)	

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 sync burst of a neighbouring cell see [5].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Sync Burst Timing			CHOICE INTEGER (0255) or INTEGER (01048575)	According to mapping in [23]

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			INTEGER	0: 0 chips
Threshold			(0254)	1: 0.125 chips 2: 0.250 chips
				 254: 31.75 chips

9.2.3.4N CSB Transmission ID

The Cell Sync Burst Transmisson ID IE uniquely identifies any cell sync burst transmission per Node B-control port.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CSB Transmission ID			Integer(0	
			65535)	

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 s	Criticality	Assigned Criticality
DL Timeslot Information LCR		1 <maxnoof DLtsLCR></maxnoof 			_	
>Time Slot LCR	М		9.2.3.24A		_	
>Midamble Shift LCR	M		9.2.3.7A		_	
>TFCI Presence	M		9.2.1.57		_	
>DL Code Information	М		TDD DL Code Information LCR 9.2.3.19C		_	

Range bound	Explanation
MaxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for
	1.28Mcps TDD.

9.2.3.40A 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 s	Criticality	Assigned Criticality
DL Time Slot ISCP Info LCR		1 <maxnoofdl LCRs></maxnoofdl 			_	
>Time Slot LCR	M		9.2.3.24A		_	
>DL Timeslot ISCP	M		9.2.3.4B		_	

Range bound	Explanation
MaxnoofDLLCRs	Maximum number of Downlink time slots per Radio Link for
	1.28Mcps TDD.

9.2.3.5 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DPCH ID			INTEGER	
			(0239)	

9.2.3.5A DSCH TDD Information

The DSCH TDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE type and reference	Semantics descriptions	Criticality	Assigned Criticality
DSCH TDD Information		1 to <maxnoof DSCHs></maxnoof 			_	
>DSCH ID	М		9.2.1.27		_	
>CCTrCH ID	M		9.2.3.2	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	М		9.2.1.60		_	

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.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DwPCH Power			Enumerated(-10+5dB,)	Step 1dB

9.2.3.5C Frame Adjustment value

The Frame Adjustment value IE represents the frame number correction within the initial synchronisation phase.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Frame Adjustment value			INTEGER (04095)	SFN _{new} =(SFN _{old} +Frame Adjustment value) mod 4096

9.2.3.5D IPDL TDD Parameter

The IPDL TDD Parameter IE provides information about IPDL to be applied for TDD when activated.

IE/Group Name	Presence	Range	IE type and reference	Semantics description s	Criticality	Assigned Criticality
IP spacingTDD	M		ENUMERA TED(30, 40, 50, 70, 100,)	See [21]	-	
IP Start	М		Integer(0 4095)	See [21]	-	
IP Slot	М		Integer(0 14)	See [21]	_	
IP PCCPCH	M		ENUMERA TED(Switc h 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.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Max FPACH Power			Enumerated(-10+5dB,)	Step 1dB

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 Shifts			ENUMERAT ED (4, 8,)	

9.2.3.7 Midamble shift and burst type

This information element indicates burst type and midamble allocation.

The 256 chip midamble supports 3 different time shifts, the 512 chips midamble may support 8 or even 16 time shifts.

Three different midamble allocation schemes exist:

Default midamble: the midamble shift is selected by layer 1 depending on the associated channelisation code (DL and UL)

Common midamble: the midamble shift is chosen by layer 1 depending on the number of channelisation codes (possible in DL only)

UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL)

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE Burst Type				
>"Type 1"				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE	
			specific midamble)	
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(015)	
>"Type 2"				
>>Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 2	M		Integer(3,6)	As defined in [19]
>>Midamble Shift	C-UE		INTEGER (05)	
>"Type 3"				UL only
>>Midamble Allocation Mode	M		Enumerated (Default midamble, UE specific midamble)	
>> Midamble Configuration Burst Type 1 And 3	M		Integer(4, 8, 16)	As defined in [19]
>>Midamble Shift	C-UE		Integer(015)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

9.2.3.7A Midamble shift LCR

This information element indicates midamble allocation in 1.28Mcps TDD.

IE/Group name	Presence	Range	IE type and reference	Semantics description
Midamble Allocation Mode	M		Enumerated (Default midamble, Common midamble, UE specific midamble)	
Midamble Shift LCR	C-UE		Integer(015	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

9.2.3.7B 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			ENUMERAT ED (4.0.4	
period			ED (1, 2, 4, 8,)	

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 cell sync bursts shall be transmitted or the cell sync bursts from the neighbouring cells shall be measured.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Number of repetitions per			INTEGER	
cycle period			(210)	

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			ENUMERAT	
			ED (2, 4,	
			8,)	

9.2.3.9 PCCPCH Power

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.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PCCPCH Power			INTEGER(-	Unit dBm
			15+40,)	Granularity 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]

9.2.3.12 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	See ref. [6]
			(0255)	

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			ENUMERAT ED (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			ENUMERAT	
-			ED(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(0 255)	

9.2.3.15 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Repetition Length			INTEGER(1.	
			.63)	

9.2.3.16 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the Radio Frame J, it is assigned to the same physical channel also in all the Radio Frames J+n*Repetition Period (where n is an integer) see ref. [18].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Repetition Period			ENUMERAT	
•			ED(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(0.	
			.6)	

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 (1, 2,, 256)	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 per Cycle Length where the cell sync bursts shall be transmitted or the cell sync 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 cell sync bursts shall be performed

Different methods shall apply for the measured cell sync burst reports. In the frequency acquisition phase the measurement report shall be sent when the frequency locking is completed. In the initial phase and for the measurement on late-entrant cells an immediate report after the measured frame is expected.

In the steady-state phase measurement reports may be given after every measured frame, after every SFN period, after every cycle length or only when the requested threshold is exceeded.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Synchronisation Report characteristics type	М		ENUMERAT ED (Frame	
			related, SFN period	

			related, Cycle length related, Threshold exceeding, Frequency Acquisition completed,)	
Threshold exceeding	C- Threshold exceeding			Applies only to the Steady State Phase
>Cell Sync Burst Threshold Information		1 <maxnoofcellsyn cBursts></maxnoofcellsyn 		
>>Sync Frame number to receive	M		Sync Frame number 9.2.3.18C	
>>Cell Sync Burst Information		1 <maxnoofrecep e="" tionspersyncfram=""></maxnoofrecep>		
>>>Cell Sync Burst Code	М		9.2.3.4G	
>>>Cell Sync Burst Code shift	M		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	

Range bound	Explanation
maxnoofCellSyncBursts	Maximum number of cell sync burst per cycle
maxnoofreceptionsperSyncFrame	Maximum number of cell sync burst receptions per
	Sync Frame

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 reference	Semantics description
Synchronisation Report Type			ENUMERAT	
			ED (Initial	
			Phase,	
			Steady-State	
			Phase, Late-	
			Entrant Cell,	
			Frequency	
			Acquisition,	
)	

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	Semantics description
			reference	
TDD Channelisation Code			ENUMERAT	
			ED ((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 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
CHOICE SF				
>SF=1			Enumerated(QPSK, 8PSK,)	Modulation options in contrast to 3.84Mcps TDD mode
>Otherwise				
>>TDD Channelisation			ENUMERAT	
Code			ED ((1/1),	
			(2/1), (2/2),	
			(4/1),(4/4),	
			(8/1), (8/8),	
			(16/1)	
			(16/16),)	

CHOICE SF	Condition under which the given SF is chosen
SF =1	"spreading factor" is set to 1
otherwise	"spreading factor" is set to a value distinct from 1

9.2.3.19A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The first range 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 second range 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
TDD DPCH Offset			CHOICE	
			INTEGER	
			(063) or	
			INTEGER	
			(0255)	

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 s	Criticality	Assigned Criticality
TDD DL Code Information		1 <maxnoof DPCH></maxnoof 			_	
>DPCH ID	М		9.2.3.5		_	
>TDD Channelisation Code	М		9.2.3.19		_	

Range bound	Explanation
maxnoOfDPCH	Maximum number of DPCH 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 s	Criticality	Assigned Criticality
TDD DL Code Information LCR		1 <maxnoof DPCHLCR ></maxnoof 			-	
>DPCH ID	M		9.2.3.5		_	
>TDD Channelisation Code LCR	М		9.2.3.19a		1	

Range bound	Explanation
maxnoOfDPCHLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD

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			INTEGER	
Offset			(063)	

9.2.3.21 TDD TPC DL step size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
TDD TPC Downlink step size			ENUMERAT	
			ED (1, 2,	
			3,)	

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 s	Criticality	Assigned Criticality
TDD UL Code Information		1 <maxno OfDPCH ></maxno 			-	
>DPCH ID	М		9.2.3.5		_	
>TDD Channelisation Code	М		9.2.3.19		_	

Range bound	Explanation
MaxnoOfDPCH	Maximum number of DPCH 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 s	Criticality	Assigned Criticality
TDD UL Code Information LCR		1 <maxno OfDPCH LCR></maxno 			-	
>DPCH ID	M		9.2.3.5		_	
>TDD Channelisation Code LCR	М		9.2.3.19a		_	

Range bound	Explanation
MaxnoOfDPCHLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD.

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. 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
Timing Adjustment value			CHOICE INTEGER (0255) or INTEGER (01048575)	According to mapping in [23]

9.2.3.22A Timing Advance Applied

Defines the need for Rx Timing Deviation measurement results to be reported in a particular cell.

For 1.28Mcps TDD this IE must be set "No"

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Timing Advance Applied			ENUMERAT ED (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 represents the minimum time interval inside a Radio Frame that can be assigned to a Physical Channel in 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Time Slot LCR			INTEGER (06)	

9.2.3.25 Time Slot Status

This parameter indicates whether the TS in the cell is active or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Time Slot Status			Enumerated	
			(active,	
			notActive,)	

9.2.3.26 Transmission Diversity Applied

Defines if Transmission Diversity on DCHs to be applied in a cell (see ref. [19]).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Transmission Diversity Applied			Boolean	

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 (According to mapping in [23].
			0127)	

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			ENUMERAT	
			ED	
			(SF_Variatio	
			n_supported,	
			SF_Variation	
			_NOT_supp	
			orted)	

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 descriptions	Criticality	Assigned Criticality
UL Timeslot Information		1 <maxn oofULts ></maxn 			_	
>Time Slot	M		9.2.3.23		_	
>Midamble Shift and Burst Type	М		9.2.3.7		_	
>TFCI Presence	M		9.2.1.57		_	
> UL Code Information	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 s	Criticality	Assigned Criticality
UL Time Slot ISCP Info		1 <maxnooful ts></maxnooful 				
>Time Slot	M		9.2.3.23			
>UL Timeslot ISCP	M		9.2.3.26A			

Range bound	Explanation
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

9.2.3.26E UL Timeslot Information LCR

The UL Timeslot Information IE provides information on the time slot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics descriptions	Criticality	Assigned Criticality
UL Timeslot Information LCR		1 <maxn oofULts LCR></maxn 			_	
>Time Slot LCR	М		9.2.3.24A		_	
>Midamble Shift LCR	М		9.2.3.7A		_	
>TFCI Presence	M		9.2.1.57		_	
> UL Code Information	М		TDD UL Code Information LCR 9.2.3.21B			

Range bound	Explanation
MaxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

9.2.3.26F UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interfernce level for each time slot within the Radio Link.

IE/Group Name	Presence	Range	IE type and reference	Semantics description s	Criticality	Assigned Criticality
UL Time Slot ISCP Info LCR		1 <maxnooful tsLCR></maxnooful 			-	
>Time Slot LCR	М		9.2.3.24A		1	
>UL Timeslot ISCP	М		9.2.3.26A		-	

Range bound	Explanation
MaxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD

9.2.3.27 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 s	Criticality	Assigned Criticality
USCH Information		1 to <maxnoof USCHs></maxnoof 	1010101100		ı	
>USCH ID	M		9.2.3.27		_	
>CCTrCH ID	M		9.2.3.3	UL CCTrCH in which the USCH is mapped	1	
>Transport Format Set	M		9.2.1.59	For USCH	_	
>Allocation/Retention Priority	M		9.2.1.1A		_	

Range bound	Explanation
MaxnoofUSCHs	Maximum number of USCH for one UE

9.2.3.29 USCH Information Response

The USCH $\mathit{Information}$ $\mathit{Response}$ IE provides information for USCHs that have been established or modified.

IE/Group Name	Presence	Range	IE type and reference	Semantics description s	Criticality	Assigned Criticality
USCH Information Response		1 <maxnoof USCHs></maxnoof 			_	
>USCH ID	М		9.2.3.27		_	
>Binding ID	0		9.2.1.4		_	
>Transport Layer Address	0		9.2.1.63		_	

Range bound	Explanation
MaxnoofUSCHs	Maximum number of USCHs for one UE

9.3 Message and Information element abstract syntax (with ASN.1)

9.3.0 General

Subclause 9.3 presents the Abstract Syntax of NBAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclauses 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, where the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of NBAP messages. NBAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a NBAP message according to the PDU definitions module and with the following additional rules (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list where the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

If a NBAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

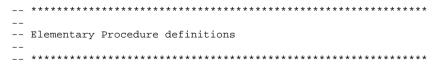
9.3.1 Usage of Private Message mechanism for non-standard use

The private message mechanism for non-standard use may be used

- For special operator- (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multi-vendor inter-operability.
- By vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

9.3.2 Elementary Procedure Definitions



```
NBAP-PDU-Discriptions {
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, ResourceStatusIndication, SystemInformationUpdateRequest, SystemInformationUpdateResponse, SystemInformationUpdateFailure, ResetRequest, ResetResponse, RadioLinkPreemptionRequiredIndication, RadioLinkSetupRequestFDD, RadioLinkSetupRequestTDD, RadioLinkSetupResponseFDD, RadioLinkSetupResponseTDD, RadioLinkSetupFailureFDD, RadioLinkSetupFailureTDD, RadioLinkAdditionRequestFDD, RadioLinkAdditionRequestTDD, RadioLinkAdditionResponseFDD, RadioLinkAdditionResponseTDD, RadioLinkAdditionFailureFDD, RadioLinkAdditionFailureTDD, 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,

PhysicalSharedChannelReconfigurationResponseTDD, PhysicalSharedChannelReconfigurationFailureTDD, CellSynchronisationInitiationRequestTDD, CellSynchronisationInitiationResponseTDD, CellSynchronisationInitiationFailureTDD, CellSynchronisationReconfigurationRequestTDD, CellSynchronisationReconfigurationResponseTDD, CellSynchronisationReconfigurationFailureTDD, CellSynchronisationAdjustmentRequestTDD, CellSynchronisationAdjustmentResponseTDD, CellSynchronisationAdjustmentFailureTDD, CellSynchronisationReportTDD, CellSynchronisationTerminationRequestTDD, CellSynchronisationFailureIndicationTDD 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-physicalSharedChannelReconfiguration, id-privateMessageForDedicated, id-privateMessageForCommon, id-radioLinkAddition, id-radioLinkDeletion, id-radioLinkFailure,

```
id-radioLinkPreemption,
   id-radioLinkRestoration,
   id-radioLinkSetup.
   id-reset,
   id-resourceStatusIndication,
   id-cellSynchronisationAdjustment,
   id-synchronisedRadioLinkReconfigurationCancellation,
   id-synchronisedRadioLinkReconfigurationCommit,
   id-synchronisedRadioLinkReconfigurationPreparation,
   id-systemInformationUpdate,
   id-unblockResource,
   id-unSynchronisedRadioLinkReconfiguration
FROM NBAP-Constants;
  -- Interface Elementary Procedure Class
  *****************
NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
   &InitiatingMessage
   &SuccessfulOutcome
                                    OPTIONAL,
   &UnsuccessfulOutcome
                                    OPTIONAL,
   &Out.come
                                    OPTIONAL,
   &messageDiscriminator
                                    MessageDiscriminator,
   &procedureID
                                    ProcedureID
                                                  UNIQUE,
   &criticality
                                    Criticality
                                                  DEFAULT ignore
WITH SYNTAX {
   INITIATING MESSAGE
                                    &InitiatingMessage
   [SUCCESSFUL OUTCOME
                                    &SuccessfulOutcomel
                                    &UnsuccessfulOutcome]
   [UNSUCCESSFUL OUTCOME
   [ OUTCOME
                                    &Outcome1
   MESSAGE DISCRIMINATOR
                                    &messageDiscriminator
   PROCEDURE ID
                                    &procedureID
   [CRITICALITY
                                    &criticality]
     ****************
-- Interface PDU Definition
NBAP-PDU ::= CHOICE {
   initiatingMessage
                         InitiatingMessage,
   succesfulOutcome
                         SuccessfulOutcome,
   unsuccesfulOutcome
                         UnsuccessfulOutcome,
   outcome
                         Outcome,
   . . .
```

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```
InitiatingMessage ::= 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.&InitiatingMessage({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
SuccessfulOutcome ::= SEOUENCE
    procedureID
                            NBAP-ELEMENTARY-PROCEDURE. &procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
                            NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    criticality
                           NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    messageDiscriminator
    transactionID
                           TransactionID,
    value
                            NBAP-ELEMENTARY-PROCEDURE. &SuccessfulOutcome({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
UnsuccessfulOutcome ::= 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
                            NBAP-ELEMENTARY-PROCEDURE: &UnsuccessfulOutcome({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
Outcome ::= SEOUENCE {
    procedureID
                            NBAP-ELEMENTARY-PROCEDURE.&procedureID ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality
                            NBAP-ELEMENTARY-PROCEDURE.&criticality ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
                            NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    messageDiscriminator
    transactionID
                            TransactionID,
                            NBAP-ELEMENTARY-PROCEDURE.&Outcome ({NBAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
  Interface Elementary Procedure List
NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
    NBAP-ELEMENTARY-PROCEDURES-CLASS-1
   NBAP-ELEMENTARY-PROCEDURES-CLASS-2
    . . .
NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::=
    cellSetupFDD
    cellSetupTDD
    cellReconfigurationFDD
    cellReconfigurationTDD
    cellDeletion
    commonTransportChannelSetupFDD
    commonTransportChannelSetupTDD
```

```
commonTransportChannelReconfigureFDD
    {\tt commonTransportChannelReconfigureTDD}
    commonTransportChannelDelete
    audit.
    blockResource
    radioLinkSetupFDD
    radioLinkSetupTDD
    systemInformationUpdate
    commonMeasurementInitiation
    radioLinkAdditionFDD
    radioLinkAdditionTDD
    radioLinkDeletion
    reset
    synchronisedRadioLinkReconfigurationPreparationFDD
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    dedicatedMeasurementInitiation
    physicalSharedChannelReconfiguration
    informationExchangeInitiation
    cellSynchronisationInitiationTDD
    cellSynchronisationReconfigurationTDD
    cellSynchronisationAdjustmentTDD
NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::= {
    resourceStatusIndication
    auditRequired
    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
-- Interface Elementary Procedures
-- Class 1
-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellSetupRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CellSetupResponse
                            CellSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-cellSetup, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellSetupRequestTDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CellSetupResponse
                            CellSetupFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-cellSetup, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellReconfigurationRequestFDD
                            CellReconfigurationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            CellReconfigurationFailure
                            common
    MESSAGE DISCRIMINATOR
                            { procedureCode id-cellReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CellReconfiguration(TDD) ***
cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellReconfigurationRequestTDD
    INITIATING MESSAGE
                            CellReconfigurationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            CellReconfigurationFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-cellReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CellDeletion ***
```

```
cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellDeletionRequest
    SUCCESSFUL OUTCOME
                            CellDeletionResponse
   MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-cellDeletion, ddMode common }
    CRITICALITY
                            reject
-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelSetupRequestFDD
    SUCCESSFUL OUTCOME
                            CommonTransportChannelSetupResponse
                            CommonTransportChannelSetupFailure
    UNSUCCESSFUL OUTCOME
   MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelSetup, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelSetupRequestTDD
                            CommonTransportChannelSetupResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelSetupFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelSetup, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelReconfigurationRequestFDD
                            CommonTransportChannelReconfigurationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationFailure
   MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelReconfigure (TDD) ***
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            {\tt CommonTransportChannelReconfigurationRequestTDD}
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            CommonTransportChannelReconfigurationResponse
                            {\tt CommonTransportChannelReconfigurationFailure}
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonTransportChannelDeletionRequest
    SUCCESSFUL OUTCOME
                            CommonTransportChannelDeletionResponse
    MESSAGE DISCRIMINATOR
```

```
PROCEDURE ID
                            { procedureCode id-commonTransportChannelDelete, ddMode common }
    CRITICALITY
                            reject
-- *** Audit ***
audit NBAP-ELEMENTARY-PROCEDURE ::= {
                            AuditRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            AuditResponse
    UNSUCCESSFUL OUTCOME
                            AuditFailure
    MESSAGE DISCRIMINATOR
                            { procedureCode id-audit, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** BlockResourceRequest ***
blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
                            BlockResourceRequest
    INITIATING MESSAGE
                            BlockResourceResponse
    SUCCESSFUL OUTCOME
                            BlockResourceFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-blockResource, ddMode common }
    CRITICALITY
                            reject
-- *** RadioLinkSetup (FDD) ***
radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkSetupRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkSetupResponseFDD
    UNSUCCESSFUL OUTCOME
                            RadioLinkSetupFailureFDD
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-radioLinkSetup, ddMode fdd }
    CRITICALITY
                            reject
-- *** RadioLinkSetup (TDD) ***
radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkSetupRequestTDD
                            RadioLinkSetupResponseTDD
    SUCCESSFUL OUTCOME
                            RadioLinkSetupFailureTDD
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-radioLinkSetup, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** SystemInformationUpdate ***
systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            SystemInformationUpdateRequest
                            SystemInformationUpdateResponse
    SUCCESSFUL OUTCOME
                            SystemInformationUpdateFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-systemInformationUpdate, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
```

```
-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResetRequest
    SUCCESSFUL OUTCOME
                            ResetResponse
    MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-reset, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementInitiationRequest
    SUCCESSFUL OUTCOME
                            CommonMeasurementInitiationResponse
                            CommonMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            { procedureCode id-commonMeasurementInitiation, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkAdditionRequestFDD
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            RadioLinkAdditionResponseFDD
    UNSUCCESSFUL OUTCOME
                            RadioLinkAdditionFailureFDD
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkAddition, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkAdditionRequestTDD
                            RadioLinkAdditionResponseTDD
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            RadioLinkAdditionFailureTDD
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkAddition, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
-- *** RadioLinkDeletion
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME
                            RadioLinkDeletionResponse
   MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-radioLinkDeletion, ddMode common }
    PROCEDURE ID
    CRITICALITY
-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE
                            RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationReady
    UNSUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
   MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    CRITICALITY
                            reject
-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationPrepareTDD
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationReady
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationRequestFDD
                            RadioLinkReconfigurationResponse
    SUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationRequestTDD
                            RadioLinkReconfigurationResponse
    SUCCESSFUL OUTCOME
    UNSUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
                           dedicated
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    CRITICALITY
                            reject
-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DedicatedMeasurementInitiationRequest
    SUCCESSFUL OUTCOME
                            DedicatedMeasurementInitiationResponse
                            DedicatedMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
                           dedicated
                            { procedureCode id-dedicatedMeasurementInitiation, ddMode common
    PROCEDURE ID
    CRITICALITY
                            reject
-- *** PhysicalSharedChannelReconfiguration (TDD only) ***
physicalSharedChannelReconfiguration NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PhysicalSharedChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME PhysicalSharedChannelReconfigurationResponseTDD
    UNSUCCESSFUL OUTCOME PhysicalSharedChannelReconfigurationFailureTDD
```

```
MESSAGE DISCRIMINATOR dedicated
    PROCEDURE ID
                        { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
    CRITICALITY
                        reject
--*** InformationExchangeInitiation ***
informationExchangeInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeInitiationRequest
    SUCCESSFUL OUTCOME
                            InformationExchangeInitiationResponse
                            InformationExchangeInitiationFailure
    UNSUCCESSFUL OUTCOME
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationExchangeInitiation, ddMode common }
    CRITICALITY
                            reject
-- *** CellSynchronisationInitiation (TDD only) ***
cellSynchronisationInitiationTDD NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE CellSynchronisationInitiationRequestTDD
    SUCCESSFUL OUTCOME CellSynchronisationInitiationResponseTDD
    UNSUCCESSFUL OUTCOME
                            CellSynchronisationInitiationFailureTDD
    MESSAGE DISCRIMINATOR
                           common
                        { procedureCode id-cellSynchronisationInitiation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                        reject
-- *** CellSynchronisationReconfiguration (TDD only) ***
cellSynchronisationReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CellsynchronisationReconfigurationRequestTDD
    SUCCESSFUL OUTCOME CellSynchronisationReconfigurationResponseTDD
                            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
    UNSUCCESSFUL OUTCOME
                            CellSynchronisationAdjustmentFailureTDD
    MESSAGE DISCRIMINATOR
                        { procedureCode id-cellSynchronisationAdjustment, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                        reject
-- Class 2
-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResourceStatusIndication
    MESSAGE DISCRIMINATOR
                           common
    PROCEDURE ID
                             procedureCode id-resourceStatusIndication, ddMode common }
    CRITICALITY
                            ignore
```

```
-- *** AuditRequired ***
auditReguired NBAP-ELEMENTARY-PROCEDURE ::=
                            AuditRequiredIndication
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                           common
    PROCEDURE ID
                            { procedureCode id-auditRequired, ddMode common }
    CRITICALITY
-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementReport
   MESSAGE DISCRIMINATOR
                           common
                            { procedureCode id-commonMeasurementReport, ddMode common }
    PROCEDURE ID
    CRITICALITY
-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementTerminationRequest
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-commonMeasurementTermination, ddMode common }
    CRITICALITY
                            ignore
-- *** CommonMeasurementFailure ***
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementFailureIndication
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-commonMeasurementFailure, ddMode common }
    CRITICALITY
                            ignore
-- *** SynchronisedRadioLinkReconfirurationCommit ***
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkReconfigurationCommit
                            dedicated
    MESSAGE DISCRIMINATOR
                            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkReconfigurationCancel
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                            dedicated
    PROCEDURE ID
                            { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common
    CRITICALITY
                            ignore
-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::= 
    INITIATING MESSAGE
                            RadioLinkFailureIndication
```

```
MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-radioLinkFailure, ddMode common }
    CRITICALITY
-- *** 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
                            { procedureCode id-radioLinkRestoration, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DedicatedMeasurementReport
                           dedicated
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementReport, ddMode common }
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
                            DedicatedMeasurementTerminationRequest
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                            { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            DedicatedMeasurementFailureIndication
    MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY
                            ignore
-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DL-PowerControlRequest
   MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-downlinkPowerControl, ddMode fdd }
    CRITICALITY
                            ignore
```

```
-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            DL-PowerTimeslotControlRequest
   MESSAGE DISCRIMINATOR
                           dedicated
    PROCEDURE ID
                            { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
                            ignore
    CRITICALITY
-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
                            CompressedModeCommand
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-compressedModeCommand, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            UnblockResourceIndication
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-unblockResource, ddMode common }
    CRITICALITY
                            ignore
-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
                            ErrorIndication
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
                            dedicated
                            { procedureCode id-errorIndicationForDedicated, ddMode common }
    PROCEDURE ID
    CRITICALITY
-- *** ErrorIndication for Common procedures ***
errorIndicationForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ErrorIndication
   MESSAGE DISCRIMINATOR
                           common
    PROCEDURE ID
                            { procedureCode id-errorIndicationForCommon, ddMode common }
    CRITICALITY
                            ignore
-- *** CellSynchronisationReporting (TDD only) ***
cellSynchronisationReportingTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellSynchronisationReportTDD
   MESSAGE DISCRIMINATOR
                            common
                            { procedureCode id-cellSynchronisationReporting, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** CellSynchronisationTermination (TDD only) ***
cellSynchronisationTerminationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CellSynchronisationTerminationRequestTDD
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-cellSynchronisationTermination, ddMode tdd }
```

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```
CRITICALITY
                            ignore
-- *** CellSynchronisationFailure (TDD only) ***
cellSynchronisationFailureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
                            CellSynchronisationFailureIndicationTDD
    INITIATING MESSAGE
    MESSAGE DISCRIMINATOR
                           common
    PROCEDURE ID
                            { procedureCode id-cellSynchronisationFailure, ddMode tdd }
    CRITICALITY
-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
                            dedicated
    MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-privateMessageForDedicated, ddMode common }
    CRITICALITY
-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            PrivateMessage
    MESSAGE DISCRIMINATOR
                            common
    PROCEDURE ID
                            { procedureCode id-privateMessageForCommon, ddMode common }
                            ignore
    CRITICALITY
-- *** InformationReporting ***
informationReporting NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationReport
    MESSAGE DISCRIMINATOR
                            { procedureCode id-informationReporting, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
-- *** InformationExchangeTermination ***
informationExchangeTermination NBAP-ELEMENTARY-PROCEDURE ::= {
                            InformationExchangeTerminationRequest
    INITIATING MESSAGE
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationExchangeTermination, ddMode common }
    CRITICALITY
                            ignore
-- *** InformationExchangeFailure ***
informationExchangeFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeFailureIndication
   MESSAGE DISCRIMINATOR
    PROCEDURE ID
                            { procedureCode id-informationExchangeFailure, ddMode common }
    CRITICALITY
END
```

9.3.3 PDU Definitions

```
__ ***********************************
-- PDU definitions for NBAP.
__ ******************
NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
    ***********
-- IE parameter types from other modules.
IMPORTS
   Active-Pattern-Sequence-Information,
   AddorDeleteIndicator,
   AICH-Power,
   AICH-TransmissionTiming,
   AllocationRetentionPriority,
   APPreambleSignature,
   APSubChannelNumber,
   AvailabilityStatus,
   BCCH-ModificationTime,
   BindingID,
   BlockingPriorityIndicator,
   BlockSTTD-Indicator,
   Cause,
   CCTrCH-ID,
   CDSubChannelNumbers,
   CellParameterID,
   CellSyncBurstAvailabilityIndicator,
   CellSyncBurstCode,
   CellSyncBurstCodeShift,
   CellSyncBurstRepetitionPeriod,
   CellSyncBurstSIR,
   CellSyncBurstTiming,
   CellSyncBurstTimingThreshold,
   Channel-Assignment-Indication,
   ChipOffset,
   C-ID,
```

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Closedlooptimingadjustmentmode,
CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID.
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-or-Global-CapacityCredit,
DL-Power,
DLPowerAveragingWindowSize,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID.
DSCH-ID.
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
```

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End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter.
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd.
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber.
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power.
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
```

NeighbouringTDDCellMeasurementInformation, NodeB-CommunicationContextID, NStartMessage, PagingIndicatorLength, PayloadCRC-PresenceIndicator, PCCPCH-Power, PCP-Length, PDSCH-CodeMapping, PDSCHSet-ID, PDSCH-ID. PICH-Mode, PICH-Power, PowerAdjustmentType, PowerOffset, PowerRaiseLimit, PRACH-Midamble, PreambleSignatures, PreambleThreshold, PredictedSFNSFNDeviationLimit, PredictedTUTRANGPSDeviationLimit, PrimaryCPICH-Power, PrimaryScramblingCode, PropagationDelay, SCH-TimeSlot, PunctureLimit, PUSCHSet-ID, PUSCH-ID, OE-Selector, RACH-SlotFormat, RACH-SubChannelNumbers, ReferenceClockAvailability, ReferenceSFNoffset, RepetitionLength, RepetitionPeriod, ReportCharacteristics, RequestedDataValue, RequestedDataValueInformation, ResourceOperationalState, RL-Set-ID, RL-ID, Received-total-wide-band-power-Value, AdjustmentPeriod, ScaledAdjustmentRatio, MaxAdjustmentStep, RNC-ID, ScramblingCodeNumber, SecondaryCCPCH-SlotFormat, Segment-Type, S-FieldLength, SFN, SFNSFN, SFNSFNChangeLimit, SFNSFNDriftRate,

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SFNSFNDriftRateQuality,
SFNSFNQuality,
SFNSFNTimeStamp.
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCDlCodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR.
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,
TransmitDiversityIndicator,
TransmissionGapPatternSequenceCodeInformation,
Transmission-Gap-Pattern-Sequence-Information,
TransportBearerRequestIndicator,
TransportFormatSet,
TransportLayerAddress,
TSTD-Indicator,
UARFCN,
TUTRANGPS,
TUTRANGPSChangeLimit,
TUTRANGPSDriftRate,
TUTRANGPSDriftRateQuality,
```

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TUTRANGPSQuality,
   UARFCN,
   UC-Id.
   USCH-Information,
   USCH-InformationResponse,
   UL-CapacityCredit,
   UL-DPCCH-SlotFormat,
   UL-SIR,
   III.-FP-Mode.
   UL-PhysCH-SF-Variation,
   UL-ScramblingCode,
   UL-Timeslot-Information,
   UL-TimeslotLCR-Information,
   UL-TimeSlot-ISCP-Info,
   UL-TimeSlot-ISCP-LCR-Info,
    UL-TimeslotISCP-Value,
   UL-TimeslotISCP-Value-IncrDecrThres,
    USCH-ID
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-AdjustmentRatio,
    id-AICH-Information,
    id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-AP-AICH-Information,
    id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-BCH-Information.
    id-BCCH-ModificationTime,
    id-BlockingPriorityIndicator,
    id-Cause,
    id-CauseLevel-PSCH-ReconfFailureTDD,
    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-CDCA-ICH-Information,
```

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id-CDCA-ICH-ParametersListIE-CTCH-ReconfRgstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRgstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRastTDD.
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd.
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellSyncBurstTransInit-CellSyncInitiationRgstTDD.
id-CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRgstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp.
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRgstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRgstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID.
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD.
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD.
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRgstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
```

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id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rgst,
id-DedicatedMeasurementObjectType-DM-Rsp.
id-DedicatedMeasurementType,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD.
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD.
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD.
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRgstTDD,
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-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-ReferencePowerInformationItem-DL-PC-Rgst,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rgst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode.
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC.
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRgstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
```

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id-InformationExchangeObjectType-InfEx-Rgst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType.
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSvncInfoItem-CellSvncReprtTDD.
id-IPDLParameter-Information-Cell-ReconfRgstFDD,
id-IPDLParameter-Information-Cell-SetupRgstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRgstFDD,
id-Local-Cell-ID.
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd.
id-Local-Cell-InformationList-AuditRsp.
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID.
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRgst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCvclePeriod.
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRgstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRgstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRgstTDD,
id-PCH-Information.
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRgst.
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
```

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id-PICH-ParametersItem-CTCH-SetupRgstTDD,
id-PowerAdjustmentType,
id-PRACH-Information.
id-PRACHConstant.
id-PRACH-ParametersItem-CTCH-SetupRgstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRgstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRgstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRgstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRgstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
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-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRast,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRgstFDD,
id-RACH-ParameterItem-CTCH-SetupRgstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator.
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rgst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRgstFDD,
id-RL-informationItem-RL-DeletionRgst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRgstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRgstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRgst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRgstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
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,
```

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id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD.
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRgstTDD,
id-RL-Information-RL-ReconfRgstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRgstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure.
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-S-CCPCH-Information.
id-S-CPICH-Information.
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRgstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRgstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRgstFDD,
id-SecondarySCH-Information-Cell-SetupRgstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer.
id-SSDT-CellIDforEDSCHPC.
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRgstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TFCI2-Bearer-Information-RL-SetupRgstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD.
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRgstTDD,
id-TimeSlotConfigurationList-Cell-SetupRgstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
```

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id-TransmissionDiversityApplied,
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-SetupRgstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD.
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRgstTDD,
id-UL-DPCH-InformationList-RL-SetupRgstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD.
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add.
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-LCR-InformationList-RL-SetupRgstTDD,
id-DwPCH-LCR-Information,
id-DwPCH-LCR-Information-AuditRsp,
id-DwPCH-LCR-InformationList-AuditRsp,
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRgstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRgstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRgstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp.
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
id-FPACH-LCR-ParametersItem-CTCH-SetupRgstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRgstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
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id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRgstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRgstTDD.
id-PICH-LCR-ParametersItem-CTCH-SetupRgstTDD,
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,
id-RL-InformationResponse-LCR-RL-SetupRspTDD.
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRgstTDD,
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRgstTDD.
id-TimeSlot,
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRgstTDD,
id-TimeSlotLCR-CM-Rast,
id-UL-DPCH-LCR-Information-RL-SetupRgstTDD,
id-UL-DPCH-LCR-InformationList-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-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD.
id-TimeslotISCPInfoList-LCR-DL-PC-RgstTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD.
id-UL-DPCH-LCR-InformationModify-AddList,
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
id-UL-SIRTarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRgst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRgst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRgst.
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Info-DM-Rgst,
id-PUSCH-Info-DM-Rsp,
id-PUSCH-Info-DM-Rprt,
maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfCPCHs.
maxNrOfDCHs,
maxNrOfDLCodes,
maxNrOfDLTSs,
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
```

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maxNrOfRLs,
   maxNrOfRLs-1,
   maxNrOfRLs-2.
   maxNrOfRLSets,
   maxNrOfPCPCHs.
   maxNrOfPDSCHs,
   maxNrOfPUSCHs.
   maxNrOfPRACHLCRs,
   maxNrOfPDSCHSets,
    maxNrOfPUSCHSets,
   maxNrOfReceptsPerSyncFrame,
   maxNrOfSCCPCHs,
   maxNrOfSCCPCHLCRs,
   maxNrOfULTSs.
   maxNrOfULTSLCRs,
   maxNrOfUSCHs,
   maxAPSiqNum,
   maxCPCHCell,
   maxFACHCell,
   maxFPACHCell,
   maxNoofLen,
   maxRACHCell,
   maxPCPCHCell,
   maxPRACHCell,
   maxSCCPCHCell,
   maxSCPICHCell,
    maxCellinNodeB,
    maxCCPinNodeB,
    maxCommunicationContext,
    maxLocalCellinNodeB,
    maxNrOfSlotFormatsPRACH,
   maxNrOfCellSyncBursts,
   maxNrOfReceptsPerSyncFrame,
   maxIB,
    maxIBSEG
FROM NBAP-Constants;
__ *********************
  COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
__ *********************************
CommonTransportChannelSetupRequestFDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                  {{CommonTransportChannelSetupRequestFDD-IEs}},
                          ProtocolExtensionContainer {{CommonTransportChannelSetupRequestFDD-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL,
CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID
           id-C-ID
                                                                CRITICALITY
                                                                                             TYPE
                                                                                                                     C-ID
                                                                                reject
    PRESENCE
               mandatory }
    { ID
           id-ConfigurationGenerationID
                                                                CRITICALITY
                                                                                 reject
                                                                                             TYPE
                                                                                                                     ConfigurationGenerationID
            PRESENCE
                       mandatory }
           id-CommonPhysicalChannelType-CTCH-SetupRqstFDD
                                                                                                                     CommonPhysicalChannelType-CTCH-
                                                                                 ignore
    { ID
                                                                CRITICALITY
                                                                                             TYPE
                    PRESENCE
SetupRqstFDD
                                mandatory },
    . . .
CommonPhysicalChannelType-CTCH-SetupRqstFDD ::= CHOICE {
    secondary-CCPCH-parameters
                                    Secondary-CCPCH-CTCH-SetupRqstFDD,
    pRACH-parameters
                                    PRACH-CTCH-SetupRqstFDD,
   pCPCHes-parameters
                                    PCPCH-CTCH-SetupRgstFDD,
    . . .
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
                    TFCS,
    secondary-CCPCH-SlotFormat
                                            SecondaryCCPCH-SlotFormat,
    tFCI-Presence
                                            TFCI-Presence OPTIONAL,
    -- This IE shall be present if the Secondary CCPCH Slot Format is set to any of the values from 8 to 17
    multiplexingPosition
                                            MultiplexingPosition,
    powerOffsetInformation
                                            PowerOffsetInformation-CTCH-SetupRqstFDD,
    sTTD-Indicator
                                            STTD-Indicator,
    fACH-Parameters
                                            FACH-ParametersList-CTCH-SetupRqstFDD
                                                                                         OPTIONAL,
                                            PCH-Parameters-CTCH-SetupRqstFDD
                                                                                        OPTIONAL,
    pCH-Parameters
    iE-Extensions
                                            ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
   pO1-ForTFCI-Bits
                                            PowerOffset,
   pO3-ForPilotBits
                                            PowerOffset,
                                            ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstFDD }}
```

```
FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
   FACH-ParametersListIE-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstFDD
FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                               CommonTransportChannelID,
   transportFormatSet
                               TransportFormatSet,
   toAWS
                               ToAWS,
   toAWE
                               TOAWE,
   maxFACH-Power
                               DL-Power,
                               iE-Extensions
                                                                                                OPTIONAL,
   . . .
FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
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,
                               DL-Power,
   pCH-Power
   pICH-Parameters
                                  PICH-Parameters-CTCH-SetupRqstFDD,
   iE-Extensions
                               OPTIONAL,
PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
PICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   fdd-dl-ChannelisationCodeNumber
                                     FDD-DL-ChannelisationCodeNumber,
   pICH-Power
                                     PICH-Power,
   pICH-Mode
                                     PICH-Mode,
   sTTD-Indicator
                                     STTD-Indicator,
                                     ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                  OPTIONAL,
   . . .
PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
PRACH-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   scramblingCodeNumber
                                  ScramblingCodeNumber,
   tFCS
                                     TFCS.
   preambleSignatures
                                     PreambleSignatures,
   allowedSlotFormatInformation
                                     AllowedSlotFormatInformationList-CTCH-SetupRqstFDD,
   rACH-SubChannelNumbers
                                     RACH-SubChannelNumbers,
                                     PunctureLimit,
   ul-punctureLimit
   preambleThreshold
                                     PreambleThreshold,
                                     RACH-Parameters-CTCH-SetupRqstFDD,
   rACH-Parameters
   aICH-Parameters
                                     AICH-Parameters-CTCH-SetupRqstFDD,
   iE-Extensions
                                     OPTIONAL,
PRACHITEM-CTCH-SetupRgstFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::=
AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
SetupRqstFDD
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   rACHSlotFormat
   iE-Extensions
                                     OPTIONAL,
AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ RACH-ParametersIE-CTCH-SetupRqstFDD }}
RACH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
   RACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                     CommonTransportChannelID,
   transportFormatSet
                                     TransportFormatSet,
   iE-Extensions
                                     RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
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 ::= {
PCPCH-CTCH-SetupRgstFDD ::= SEQUENCE
    cPCH-Parameters
                                   CPCH-Parameters-CTCH-SetupRqstFDD,
                                   iE-Extensions
                                                                                                                     OPTIONAL,
PCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPCH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                   CommonTransportChannelID,
    transportFormatSet
                                   TransportFormatSet,
    aPPreambleScramblingCode
                                   CPCHScramblingCodeNumber,
    cDPreambleScramblingCode
                                   CPCHScramblingCodeNumber,
    tFCS
                                   TFCS,
    cDSignatures
                                   PreambleSignatures
                                                               OPTIONAL,
    cDSubChannelNumbers
                                   CDSubChannelNumbers
                                                               OPTIONAL,
    punctureLimit
                                   PunctureLimit,
    cPCH-UL-DPCCH-SlotFormat
                                   CPCH-UL-DPCCH-SlotFormat,
    uL-SIR
                                   UL-SIR,
    initialDL-transmissionPower
                                   DL-Power,
    maximumDLPower
                                   DL-Power,
   minimumDLPower
                                   DL-Power,
    pO2-ForTPC-Bits
                                   PowerOffset,
    pO3-ForPilotBits
                                   PowerOffset,
                                   FDD-TPC-DownlinkStepSize,
    fDD-TPC-DownlinkStepSize
    nStartMessage
                                   NStartMessage,
    nEOT
                                   NEOT,
    channel-Assignment-Indication
                                   Channel-Assignment-Indication,
    cPCH-Allowed-Total-Rate
                                   CPCH-Allowed-Total-Rate,
    pCPCHChannelInfomation
                                   PCPCHChannelInformationList-CTCH-SetupRqstFDD,
    vCAMMapping-Information
                                   VCAMMapping-InformationList-CTCH-SetupRqstFDD
                                                                                       OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is set to "CA Active" --
                                   AP-AICH-Parameters-CTCH-SetupRqstFDD,
    aP-AICH-Parameters
    cDCA-ICH-Parameters
                                   CDCA-ICH-Parameters-CTCH-SetupRgstFDD,
                                   ProtocolExtensionContainer { { CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                     OPTIONAL,
    . . .
```

```
CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCPCHChannelInformationList-CTCH-SetupRqstFDD ::= SEOUENCE (SIZE (1..maxNrOfPCPCHs)) OF PCPCHChannelInformationItem-CTCH-SetupRqstFDD
PCPCHChannelInformationItem-CTCH-SetupRgstFDD ::= SEOUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    cPCHScramblingCodeNumber
                                        CPCHScramblingCodeNumber,
    dL-ScramblingCode
                                        DL-ScramblingCode,
    fdd-dl-ChannelisationCodeNumber
                                        FDD-DL-ChannelisationCodeNumber,
   pCP-Length
                                        PCP-Length,
    uCSM-Information
                                        UCSM-Information-CTCH-SetupRqstFDD
                                                                                 OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is equal to "CA Inactive" --
                                        ProtocolExtensionContainer { { PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UCSM-Information-CTCH-SetupRgstFDD ::= SEOUENCE {
    minUL-ChannelisationCodeLength
                                        MinUL-ChannelisationCodeLength,
                                        NFmax,
    channelRequestParameters
                                        ChannelRequestParametersList-CTCH-SetupRgstFDD
    iE-Extensions
                                        ProtocolExtensionContainer { { UCSM-InformationItem-CTCH-SetupRgstFDD-ExtIEs} }
                                                                                                                             OPTIONAL,
    . . .
UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ChannelRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSiqNum)) OF ChannelRequestParametersItem-CTCH-SetupRqstFDD
ChannelRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    aPPreambleSignature
                                APPreambleSignature,
    aPSubChannelNumber
                                APSubChannelNumber
                                                        OPTIONAL,
                                ProtocolExtensionContainer { { ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
ChannelRequestParametersItem-CTCH-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
VCAMMapping-InformationList-CTCH-SetupRgstFDD ::= SEQUENCE (SIZE (1..maxNoofLen)) OF VCAMMapping-InformationItem-CTCH-SetupRgstFDD
VCAMMapping-InformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    minUL-ChannelisationCodeLength
                                        MinUL-ChannelisationCodeLength,
    nFmax
                                        NFmax,
```

```
max-Number-of-PCPCHes
                                        Max-Number-of-PCPCHes,
    sFRequestParameters
                                        SFRequestParametersList-CTCH-SetupRqstFDD,
    iE-Extensions
                                        ProtocolExtensionContainer { { VCAMMapping-InformationItem-CTCH-SetupRgstFDD-ExtIEs} }
VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSiqNum)) OF SFRequestParametersItem-CTCH-SetupRqstFDD
SFRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    aPPreambleSignature
                                APPreambleSignature,
    aPSubChannelNumber
                                APSubChannelNumber
    iE-Extensions
                                ProtocolExtensionContainer { { SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs} }
                                                                                                                        OPTIONAL,
    . . .
SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION::= {
AP-AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber
                                                FDD-DL-ChannelisationCodeNumber,
    aP-AICH-Power
                                                AICH-Power,
    cSICH-Power
                                                AICH-Power,
    sTTD-Indicator
                                                STTD-Indicator,
                                                ProtocolExtensionContainer { { AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CDCA-ICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                                CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber
                                                FDD-DL-ChannelisationCodeNumber,
    cDCA-ICH-Power
                                                AICH-Power,
    sTTD-Indicator
                                                STTD-Indicator,
                                                ProtocolExtensionContainer { { CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
```

```
**********************
CommonTransportChannelSetupRequestTDD ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{CommonTransportChannelSetupRequestTDD-IEs}},
                         ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}}
   protocolExtensions
                                                                                                           OPTIONAL,
CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-C-ID
                                                                                                         C-TD
   { ID
                                                             CRITICALITY reject
                                                                                   TYPE
   PRESENCE
              mandatory }|
          id-ConfigurationGenerationID
   { ID
                                                             CRITICALITY reject
                                                                                   TYPE
                                                                                                         ConfigurationGenerationID
          PRESENCE mandatory } |
          id-CommonPhysicalChannelType-CTCH-SetupRgstTDD
                                                                                                         CommonPhysicalChannelType-CTCH-
                                                             CRITICALITY ignore
                                                                                   TYPE
SetupRastTDD
                  PRESENCE
                            mandatory },
   . . .
CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-SetupRgstTDD ::= CHOICE {
   secondary-CCPCH-parameters
                                           Secondary-CCPCH-CTCH-SetupRgstTDD,
   pRACH-parameters
                                           PRACH-CTCH-SetupRgstTDD,
Secondary-CCPCH-CTCH-SetupRgstTDD ::= SEQUENCE {
   cCTrCH-ID
                                           CCTrCH-ID,
   t FCS
                                           TFCS,
   tFCI-Coding
                                           TFCI-Coding
                                           PunctureLimit,
   punctureLimit
   secondaryCCPCH-parameterList
                                           Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD,
   fACH-ParametersList
                                           FACH-ParametersList-CTCH-SetupRqstTDD
                                                                                   OPTIONAL,
   pCH-Parameters
                                           PCH-Parameters-CTCH-SetupRqstTDD
                                                                                   OPTIONAL,
   iE-Extensions
                                           ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}}
Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD
                                                                     CRITICALITY reject
                                                                                                         EXTENSION Secondary-CCPCH-LCR-
parameterList-CTCH-SetupRqstTDD
                                PRESENCE
                                           optional
   . . .
Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}
Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   mandatory } -- Mandatory for 3.84Mcps TDD only
```

```
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,
                                           ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                              OPTIONAL,
   . . .
Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}
FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    TYPE FACH-ParametersListIE-CTCH-SetupRgstTDD PRESENCE mandatory }
FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD
FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonTransportChannelID
                                        CommonTransportChannelID,
   cCTrCH-ID
                                        CCTrCH-ID,
   dl-TransportFormatSet
                                        TransportFormatSet,
                                        ToAWS,
   toAWS
   toAWE
                                        TOAWE,
   iE-Extensions
                                        ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRgstTDD-ExtIEs} }
                                                                                                                    OPTIONAL,
FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-maxFACH-Power-LCR-CTCH-SetupRqstTDD
                                                      CRITICALITY reject
                                                                            EXTENSION DL-Power
                                                                                                            PRESENCE
                                                                                                                       optional },
   -- For 1.28Mcps TDD only
PCH-Parameters-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRgstTDD }}
PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonTransportChannelID
                                        CommonTransportChannelID,
   cCTrCH-ID
                                        CCTrCH-ID,
```

```
dl-TransportFormatSet
                                      TransportFormatSet,
   t.oAWS
                                      ToAWS,
                                      TOAWE.
   t.oAWE
   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
                                                                                                        PRESENCE
                                                                                                                   optional }
                                                                                 DL-Power
   -- For 1.28Mcps TDD only
         id-PICH-LCR-Parameters-CTCH-SetupRqstTDD
                                                        CRITICALITY reject
                                                                              EXTENSION
                                                                                                      PICH-LCR-Parameters-CTCH-
SetupRastTDD
                 PRESENCE
                            optional }, -- Mandatory for 1.28Mcps TDD only
   . . .
PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}
PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   -- Mandatory for 3.84Mcps TDD only
PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                      CommonPhysicalChannelID,
   tdd-ChannelisationCode
                                      TDD-ChannelisationCode,
   timeSlot
                                      TimeSlot,
   midambleshiftAndBurstType
                                      MidambleShiftAndBurstType,
   tdd-PhysicalChannelOffset
                                      TDD-PhysicalChannelOffset,
   repetitionPeriod
                                      RepetitionPeriod,
   repetitionLength
                                      RepetitionLength,
   pagingIndicatorLength
                                      PagingIndicatorLength,
   pICH-Power
                                      PICH-Power,
                                      ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                OPTIONAL,
PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-LCR-ParametersIE-CTCH-SetupRqstTDD }}
PICH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   } -- Mandatory for 1.28Mcps TDD
PICH-LCR-ParametersItem-CTCH-SetupRgstTDD ::= SEOUENCE {
   commonPhysicalChannelID
                                      CommonPhysicalChannelID,
                                      TDD-ChannelisationCodeLCR,
   tdd-ChannelisationCodeLCR
   timeSlotLCR
                                      TimeSlotLCR,
   midambleShiftLCR
                                      MidambleShiftLCR,
   tdd-PhysicalChannelOffset
                                      TDD-PhysicalChannelOffset,
                                      RepetitionPeriod,
   repetitionPeriod
```

```
repetitionLength
                                      RepetitionLength,
   pagingIndicatorLength
                                      PagingIndicatorLength,
   pICH-Power
                                      PICH-Power.
   iE-Extensions
                                      ProtocolExtensionContainer
                                                               OPTIONAL.
PICH-LCR-ParametersItem-CTCH-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD }}
Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   PRESENCE optional } -- Mandatory for 1.28Mcps TDD only
Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-
SetupRqstTDD
Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                          CommonPhysicalChannelID,
   tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
   timeslotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   s-CCPCH-Power
                                          DL-Power,
   iE-Extensions
                                          ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs} }
   OPTIONAL,
   . . .
Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-CTCH-SetupRgstTDD ::= SEQUENCE
   pRACH-Parameters-CTCH-SetupRqstTDD
                                          PRACH-Parameters-CTCH-SetupRgstTDD,
   iE-Extensions
                                          OPTIONAL.
   . . .
PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-PRACH-LCR-ParametersList-CTCH-SetupRgstTDD
                                                            CRITICALITY reject
                                                                                 EXTENSION
                                                                                                      PRACH-LCR-ParametersList-CTCH-
SetupRqstTDD
                 PRESENCE
                            optional
                                      } -- Mandatory for 1.28Mcps TDD only
                                                                                                      FPACH-LCR-Parameters-CTCH-
   { ID
         id-FPACH-LCR-Parameters-CTCH-SetupRgstTDD
                                                        CRITICALITY reject
                                                                             EXTENSION
SetupRastTDD
                 PRESENCE
                            optional
                                      }, -- Mandatory for 1.28Mcps TDD only
```

```
PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}
PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   } -- Mandatory for 3.84Mcps TDD only
PRACH-ParametersItem-CTCH-SetupRgstTDD ::= SEOUENCE {
   commonPhysicalChannelID
                                   CommonPhysicalChannelID,
  tFCS
                                   TFCS,
  timeslot
                                   TimeSlot,
   tdd-ChannelisationCode
                                   TDD-ChannelisationCode,
  maxPRACH-MidambleShifts
                                   MaxPRACH-MidambleShifts,
  pRACH-Midamble
                                   PRACH-Midamble,
                                   RACH-Parameter-CTCH-SetupRqstTDD,
  rACH
  iE-Extensions
                                   OPTIONAL,
   . . .
PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-Parameter-CTCH-SetupRgstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRgstTDD }}
RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
   commonTransportChannelID
                                   CommonTransportChannelID,
  uL-TransportFormatSet
                                   TransportFormatSet,
  iE-Extensions
                                   OPTIONAL,
RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD }}
PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
   PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD
PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEOUENCE {
  commonPhysicalChannelID
                                   CommonPhysicalChannelID,
   tFCS
                                   TFCS,
   timeslotLCR
                                   TimeSlotLCR,
```

```
tdd-ChannelisationCodeLCR
                                         TDD-ChannelisationCodeLCR,
   maxPRACH-MidambleShifts
                                         MaxPRACH-MidambleShifts.
   pRACH-Midamble
                                         PRACH-Midamble.
   rACH
                                         RACH-Parameter-CTCH-SetupRgstTDD,
   iE-Extensions
                                         OPTIONAL.
PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FPACH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD }}
FPACH-LCR-ParametersIE-CTCH-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    FPACH-LCR-ParametersItem-CTCH-SetupRgstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   tdd-ChannelisationCodeLCR
                                         TDD-ChannelisationCodeLCR,
   timeslotLCR
                                        TimeSlotLCR,
   midambleShiftLCR
                                        MidambleShiftLCR,
   fPACH-Power
                                     FPACH-Power,
                                         ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
   . . .
FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
     CommonTransportChannelSetupResponse ::= SEOUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{CommonTransportChannelSetupResponse-IEs}},
                       ProtocolExtensionContainer {{CommonTransportChannelSetupResponse-Extensions}}
   protocolExtensions
                                                                                             OPTIONAL,
CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
                                            CRITICALITY ignore
   { ID
         id-FACH-ParametersList-CTCH-SetupRsp
                                                                TYPE
                                                                       FACH-CommonTransportChannel-InformationResponse
                                                                                                                    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-CPCH-Parameters-CTCH-SetupRsp
                                            CRITICALITY ignore
                                                                       TYPE
                                                                              CommonTransportChannel-InformationResponse
   PRESENCE
             optional
                       } |
```

```
{ ID
          id-CriticalityDiagnostics
                                                       CRITICALITY
                                                                                        CriticalityDiagnostics
                                                                                                                              PRESENCE
                                                                      ignore
   optional
   . . .
CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse
__ ***********************************
-- COMMON TRANSPORT CHANNEL SETUP FAILURE
      CommonTransportChannelSetupFailure ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                {{CommonTransportChannelSetupFailure-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CommonTransportChannelSetupFailure-Extensions}}
                                                                                                     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 {
                         ProtocolIE-Container
   protocolIEs
                                               {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}}
                                                                                                               OPTIONAL,
   . . .
CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-C-ID
                                                   CRITICALITY reject
                                                                         TYPE
                                                                                 C-ID
   PRESENCE mandatory } |
          id-ConfigurationGenerationID
                                                                                 ConfigurationGenerationID
                                                   CRITICALITY reject
                                                                         TYPE
                                                                                                                  PRESENCE mandatory
          id-CommonPhysicalChannelType-CTCH-ReconfRgstFDD CRITICALITY reject TYPE
                                                                                 CommonPhysicalChannelType-CTCH-ReconfRqstFDD PRESENCE
   mandatory },
   . . .
```

```
CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelType-CTCH-ReconfRgstFDD ::= CHOICE {
    secondary-CCPCH-parameters
                                   Secondary-CCPCHList-CTCH-ReconfRqstFDD,
   pRACH-parameters
                                   PRACHList-CTCH-ReconfRgstFDD,
   cPCH-parameters
                                   CPCHList-CTCH-ReconfRqstFDD,
    . . .
Secondary-CCPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    fACH-ParametersList-CTCH-ReconfRqstFDD
                                              FACH-ParametersList-CTCH-ReconfRgstFDD OPTIONAL,
   pCH-Parameters-CTCH-ReconfRqstFDD
                                              PCH-Parameters-CTCH-ReconfRqstFDD
                                                                                      OPTIONAL,
   pICH-Parameters-CTCH-ReconfRqstFDD
                                              PICH-Parameters-CTCH-ReconfRqstFDD
                                                                                     OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
FACH-ParametersList-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-ReconfRgstFDD }}
FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                     CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                         PRESENCE mandatory
FACH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRgstFDD
FACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                          CommonTransportChannelID,
   maxFACH-Power
                                          DL-Power
                                                          OPTIONAL,
   toAWS
                                          ToAWS
                                                          OPTIONAL,
    t.oAWE
                                          ToAWE
                                                          OPTIONAL,
                                                                      iE-Extensions
                                          ProtocolExtensionContainer
FACH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-ReconfRqstFDD }}
PCH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-ReconfRqstFDD PRESENCE mandatory }
PCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID
                                          CommonTransportChannelID,
```

```
pCH-Power
                                      DL-Power
                                                    OPTIONAL,
   toAWS
                                      TOAWS
                                                   OPTIONAL,
                                                   OPTIONAL.
   t.oAWE
                                      TOAWE
   iE-Extensions
                                      ProtocolExtensionContainer
                                                              OPTIONAL,
PCH-ParametersItem-CTCH-ReconfRostFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PICH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRqstFDD }}
PICH-ParametersIE-CTCH-ReconfRgstFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
PICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                  CommonPhysicalChannelID,
   pICH-Power
                                      PICH-Power
                                                    OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }
   . . .
PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
   pRACH-ParametersList-CTCH-ReconfRqstFDD
                                         PRACH-ParametersList-CTCH-ReconfRgstFDD OPTIONAL,
   aICH-ParametersList-CTCH-ReconfRqstFDD
                                         AICH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
                                         ProtocolExtensionContainer { { PRACH-CTCH-ReconfRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PRACH-ParametersList-CTCH-ReconfRgstFDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersListIEs-CTCH-ReconfRgstFDD }}
PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
   PRACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRqstFDD
PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                  CommonPhysicalChannelID,
   preambleSignatures
                                      PreambleSignatures
                                                          OPTIONAL,
   allowedSlotFormatInformation
                                      AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD
                                                                                                    OPTIONAL,
   rACH-SubChannelNumbers
                                      RACH-SubChannelNumbers
                                                              OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs} }
                                                                                                                OPTIONAL,
```

```
PRACH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AllowedSlotFormatInformationList-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
ReconfRqstFDD
AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   rACH-SlotFormat
                                        RACH-SlotFormat,
                                        ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}
AICH-ParametersListIEs-CTCH-ReconfRgstFDD NBAP-PROTOCOL-IES ::= {
   { ID id-AICH-ParametersListIE-CTCH-ReconfRqstFDD
                                                 CRITICALITY reject TYPE AICH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                  PRESENCE mandatory
AICH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRgstFDD
AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                    CommonPhysicalChannelID,
   aICH-Power
                                        AICH-Power
                                                       OPTIONAL,
                                        iE-Extensions
                                                                                                                        OPTIONAL,
AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
CPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
   cPCH-ParametersList-CTCH-ReconfRqstFDD
                                                CPCH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                                OPTIONAL.
   aP-AICH-ParametersList-CTCH-ReconfRqstFDD
                                                AP-AICH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                           OPTIONAL,
   cDCA-ICH-ParametersList-CTCH-ReconfRqstFDD
                                                CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD
                                                                                                           OPTIONAL,
                                                iE-Extensions
                                                                                                                        OPTIONAL,
CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
CPCH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CPCH-ParametersListIEs-CTCH-ReconfRqstFDD }}
```

```
CPCH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD
                                                  CRITICALITY reject TYPE CPCH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                    PRESENCE mandatory }
CPCH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CPCH-ParametersItem-CTCH-ReconfRgstFDD
CPCH-ParametersItem-CTCH-ReconfRgstFDD ::= SEOUENCE {
   commonTransportChannelID
                                 CommonTransportChannelID,
   uL-SIR
                                 UL-SIR
                                                OPTIONAL,
   initialDL-transmissionPower
                                 DL-Power
                                                OPTIONAL,
  maximumDLPower
                                 DL-Power
                                                OPTIONAL,
   minimumDLPower
                                 DL-Power
                                                OPTIONAL,
   iE-Extensions
                                 ProtocolExtensionContainer { { CPCH-ParametersItem-CTCH-ReconfRgstFDD-ExtIEs} }
                                                                                                                 OPTIONAL.
CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AP-AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}
AP-AICH-ParametersListIEs-CTCH-ReconfRostFDD NBAP-PROTOCOL-IES ::= {
   { ID id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD
                                                                                                                       PRESENCE mandatory }
AP-AICH-ParametersListIE-CTCH-ReconfRgstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF AP-AICH-ParametersItem-CTCH-ReconfRgstFDD
AP-AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   aP-AICH-Power
                                         AICH-Power
                                                        OPTIONAL,
   cSICH-Power
                                         AICH-Power
                                                        OPTIONAL,
                                         ProtocolExtensionContainer { { AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                             OPTIONAL,
AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD }}
CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEOUENCE (SIZE (1...maxNrOfCPCHs)) OF CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD
CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
   commonPhysicalChannelID
                                     CommonPhysicalChannelID,
   cDCA-ICH-Power
                                         AICH-Power
                                                        OPTIONAL,
```

```
iE-Extensions
CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
__ *********************
CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                              {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
                         ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
   protocolExtensions
CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-C-ID
                                                                                        C-ID
                                                           CRITICALITY reject
   PRESENCE mandatory } |
   { ID
         id-ConfigurationGenerationID
                                                           CRITICALITY reject
                                                                                 TYPE
                                                                                        ConfigurationGenerationID
                                                                                                                              PRESENCE
   mandatory } |
   { ID id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD
                                                               CRITICALITY reject TYPE
                                                                                         Secondary-CCPCH-Parameters-CTCH-ReconfRgstTDD
   PRESENCE optional }
     ID id-PICH-Parameters-CTCH-ReconfRgstTDD
                                                CRITICALITY reject TYPE PICH-Parameters-CTCH-ReconfRqstTDD
                                                                                                                PRESENCE optional } |
     ID id-FACH-ParametersList-CTCH-ReconfRqstTDD CRITICALITY reject TYPE FACH-ParametersList-CTCH-ReconfRqstTDD
                                                                                                             PRESENCE optional }
                                                                                                                PRESENCE optional },
   { ID id-PCH-Parameters-CTCH-ReconfRqstTDD
                                                CRITICALITY reject TYPE
                                                                         PCH-Parameters-CTCH-ReconfRqstTDD
   . . .
CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD
                                                   CRITICALITY reject EXTENSION FPACH-LCR-Parameters-CTCH-ReconfRgstTDD
                                                                                                                           PRESENCE
optional }, -- Mandatory For 3.84Mcps TDD only
Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD::= SEQUENCE
   cCTrCH-ID
                                 CCTrCH-ID,
   secondaryCCPCHList
                                 Secondary-CCPCHList-CTCH-ReconfRgstTDD
                                                                             OPTIONAL.
                                 ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                             OPTIONAL,
Secondary-CCPCH-CTCH-ReconfrastTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCHList-CTCH-ReconfRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD }}
Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
```

```
{ ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
                                                        CRITICALITY reject TYPE Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
                                                                                                                             PRESENCE mandatory }
Secondary-CCPCHListIE-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRgstTDD
Secondary-CCPCHItem-CTCH-ReconfRgstTDD ::= SEQUENCE {
    commonPhysicalChannelID
                                        CommonPhysicalChannelID,
    sCCPCH-Power
                                        DL-Power
                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                             OPTIONAL,
Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
PICH-Parameters-CTCH-ReconfRqstTDD
                                    ::= SEOUENCE
                                        CommonPhysicalChannelID,
    commonPhysicalChannelID
    pICH-Power
                                        PICH-Power
                                                        OPTIONAL,
                                        ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                          OPTIONAL,
    iE-Extensions
PICH-Parameters-CTCH-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FACH-ParametersList-CTCH-ReconfRgstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRgstTDD
FACH-ParametersItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
                                                    OPTIONAL,
    toAWS
                                    ToAWS
                                                    OPTIONAL,
    toAWE
                                    TOAWE
                                    ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD
                                                            CRITICALITY reject
                                                                                    EXTENSION DL-Power
                                                                                                                       PRESENCE
                                                                                                                                   optional },
    -- For 3.84Mcps TDD only
    . . .
PCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonTransportChannelID
                                    CommonTransportChannelID,
    toAWS
                                    ToAWS
                                                    OPTIONAL,
    toAWE
                                    ToAWE
                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                                       OPTIONAL,
PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
          id-PCH-Power-LCR-CTCH-ReconfRqstTDD
                                                        CRITICALITY reject
                                                                                EXTENSION DL-Power
                                                                                                                       PRESENCE
                                                                                                                                   optional },
```

```
... -- For 3.84Mcps TDD only
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
   commonPhysicalChannelId
                               CommonPhysicalChannelID,
   fPACHPower
                            FPACH-Power
                                          OPTIONAL,
   iE-Extensions
                                ProtocolExtensionContainer { { FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs} }
                                                                                                           OPTIONAL.
FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ******************
  COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
    CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
                                              {{CommonTransportChannelReconfigurationResponse-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer {{CommonTransportChannelReconfigurationResponse-Extensions}}
                                                                                                           OPTIONAL,
CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-CriticalityDiagnostics
                                       CRITICALITY
                                                     ignore
                                                                   TYPE
                                                                          CriticalityDiagnostics
                                                                                                         PRESENCE optional },
   . . .
CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
    ********************
CommonTransportChannelReconfigurationFailure ::= SEQUENCE {
                                             {{CommonTransportChannelReconfigurationFailure-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer {{CommonTransportChannelReconfigurationFailure-Extensions}}
                                                                                                               OPTIONAL,
CommonTransportChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                       CRITICALITY ignore
                                                                TYPE
                                                                       Cause
                                                                                                            PRESENCE mandatory
   { 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 ::= {
    ID
         id-C-ID
                                                                                                                  mandatory} |
                                         CRITICALITY reject
                                                             TYPE
                                                                    C-ID
                                                                                                        PRESENCE
          id-CommonPhysicalChannelID
                                         CRITICALITY reject
                                                             TYPE
                                                                    CommonPhysicalChannelID
                                                                                                     PRESENCE mandatory |
             id-ConfigurationGenerationID
      { ID
                                            CRITICALITY reject
                                                                 TYPE
                                                                        ConfigurationGenerationID
                                                                                                   PRESENCE mandatory },
CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   COMMON TRANSPORT CHANNEL DELETION RESPONSE
  ****************
CommonTransportChannelDeletionResponse ::= SEQUENCE {
      protocolIEs
                           ProtocolIE-Container
                                                {{CommonTransportChannelDeletionResponse-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{CommonTransportChannelDeletionResponse-Extensions}}
                                                                                                     OPTIONAL,
CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
          id-CriticalityDiagnostics
   { ID
                                     CRITICALITY
                                                   ignore
                                                             TYPE
                                                                    CriticalityDiagnostics
                                                                                                     PRESENCE optional },
   . . .
CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- BLOCK RESOURCE REQUEST
  *****************
```

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```
BlockResourceRequest ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                {{BlockResourceRequest-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{BlockResourceRequest-Extensions}}
                                                                                                 OPTIONAL,
BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
     TD
         id-C-ID
                                          CRITICALITY reject
                                                               TYPE
                                                                      C-ID
                                                                                                              PRESENCE mandatory } |
     ID
         id-BlockingPriorityIndicator
                                                                                                        PRESENCE mandatory } |
                                          CRITICALITY reject
                                                               TYPE
                                                                      BlockingPriorityIndicator
   { ID
        id-ShutdownTimer
                                          CRITICALITY reject
                                                               TYPE
                                                                      ShutdownTimer
                                                                                                              PRESENCE conditional },
   -- The IE shall be present if the Blocking Priority Indicator IE indicates 'Normal Priority'--
BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- BLOCK RESOURCE RESPONSE
__ *********************
BlockResourceResponse ::= SEQUENCE {
                                                    {{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 ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                                {{BlockResourceFailure-IEs}},
                        ProtocolExtensionContainer {{BlockResourceFailure-Extensions}}
   protocolExtensions
                                                                                     OPTIONAL,
BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
```

```
AuditRequest ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{AuditRequest-IEs}},
                              ProtocolExtensionContainer {{AuditRequest-Extensions}}
   protocolExtensions
                                                                                       OPTIONAL,
AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
          id-Start-Of-Audit-Sequence-Indicator
                                                     CRITICALITY
                                                                    reject TYPE Start-Of-Audit-Sequence-Indicator PRESENCE mandatory },
   . . .
AuditReguest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
__ *********************
-- AUDIT RESPONSE
  *****************
AuditResponse ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{AuditResponse-IEs}},
                              ProtocolExtensionContainer {{AuditResponse-Extensions}}
   protocolExtensions
                                                                                           OPTIONAL,
AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
          id-End-Of-Audit-Sequence-Indicator
                                                     CRITICALITY
                                                                    ignore TYPE
                                                                                    End-Of-Audit-Sequence-Indicator
                                                                                                                      PRESENCE mandatory } |
          id-Cell-InformationList-AuditRsp
                                                                                           Cell-InformationList-AuditRsp
                                                                                                                               PRESENCE
    { ID
                                                     CRITICALITY
                                                                    ignore
    optional }
     ID
          id-CCP-InformationList-AuditRsp
                                                     CRITICALITY
                                                                    ignore
                                                                                    TYPE
                                                                                           CCP-InformationList-AuditRsp
                                                                                                                            PRESENCE optional
    -- CCP (Communication Control Port) --
                                                     CRITICALITY
                                                                                    TYPE
                                                                                           Local-Cell-InformationList-AuditRsp
           id-Local-Cell-InformationList-AuditRsp
                                                                    ignore
                                                                                                                                  PRESENCE
    optional
    { ID
           id-Local-Cell-Group-InformationList-AuditRsp
                                                         CRITICALITY
                                                                        ignore
                                                                                    TYPE
                                                                                           Local-Cell-Group-InformationList-AuditRsp PRESENCE
    optional
    { ID
           id-CriticalityDiagnostics
                                                     CRITICALITY
                                                                    ignore
                                                                                    TYPE
                                                                                           CriticalityDiagnostics
                                                                                                                            PRESENCE optional
    },
AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}
Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
```

P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}

```
P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-P-CPICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                   PRESENCE mandatory }
S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}
S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-S-CPICH-Information CRITICALITY ignore
                                              TYPE Common-PhysicalChannel-Status-Information
                                                                                                     PRESENCE mandatory }
P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}
P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-P-CCPCH-Information CRITICALITY ignore
                                               TYPE Common-PhysicalChannel-Status-Information
                                                                                                     PRESENCE mandatory }
BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}
BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-BCH-Information CRITICALITY ignore
                                           TYPE Common-TransportChannel-Status-Information
                                                                                                     PRESENCE mandatory }
S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}
S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-S-CCPCH-Information CRITICALITY ignore
                                              TYPE Common-PhysicalChannel-Status-Information
                                                                                                     PRESENCE mandatory }
PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}
PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}
PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}
FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}
PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}
```

```
RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
AICH-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}
AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-AICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                 PRESENCE mandatory }
PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}
PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE optional }
CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}
CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE optional }
AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}
AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   { ID id-AP-AICH-Information CRITICALITY ignore
                                            TYPE Common-PhysicalChannel-Status-Information
                                                                                                 PRESENCE mandatory }
CDCA-ICH-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}
CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}
SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
CCP-InformationList-AuditRsp ::=SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}
CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
   {ID id-CCP-InformationItem-AuditRsp
                                                                        CCP-InformationItem-AuditRsp
                                                                                                     PRESENCE mandatory }
                                       CRITICALITY
                                                    ignore
                                                                 TYPE
CCP-InformationItem-AuditRsp ::= SEOUENCE
   communicationControlPortID
                                CommunicationControlPortID,
   resourceOperationalState
                                ResourceOperationalState,
   availabilityStatus
                                AvailabilityStatus,
   iE-Extensions
                                ProtocolExtensionContainer {{ CCP-InformationItem-AuditRsp-ExtIEs }}
                                                                                                 OPTIONAL,
   . . .
```

```
CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
FPACH-LCR-InformationList-AuditRsp ::= SEOUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}
FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-Information-AuditRsp CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                                       PRESENCE mandatory }
DwPCH-LCR-InformationList-AuditRsp ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-AuditRsp }}
DwPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    ID id-DwPCH-LCR-Information-AuditRsp CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                                       PRESENCE mandatory }
Local-Cell-InformationList-AuditRsp ::=SEOUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-
AuditRsp }}
Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
                                                                                                                    Local-Cell-InformationItem-
           id-Local-Cell-InformationItem-AuditRsp
                                                            CRITICALITY
                                                                            ignore
                                                                                            TYPE
AuditRsp
                PRESENCE
                           mandatory}
Local-Cell-InformationItem-AuditRsp ::= SEOUENCE
    local-Cell-ID
                                                Local-Cell-ID,
    dl-or-global-capacityCredit
                                                DL-or-Global-CapacityCredit,
    ul-capacityCredit
                                                UL-CapacityCredit
                                                                        OPTIONAL,
    commnonChannelsCapacityConsumptionLaw
                                                CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw
                                                DedicatedChannelsCapacityConsumptionLaw,
    maximumDL-PowerCapability
                                                MaximumDL-PowerCapability
                                                                                OPTIONAL,
    minSpreadingFactor
                                                MinSpreadingFactor
                                                                                OPTIONAL,
    minimumDL-PowerCapability
                                                MinimumDL-PowerCapability
                                                                                OPTIONAL,
    local-Cell-Group-ID
                                                Local-Cell-ID
                                                                                OPTIONAL,
                                                ProtocolExtensionContainer {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}
    iE-Extensions
                                                                                                                                OPTIONAL,
    . . .
Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      id-ReferenceClockAvailability
                                            CRITICALITY
                                                            ignore
                                                                            EXTENSION ReferenceClockAvailability
                                                                                                                          PRESENCE optional },
    . . .
Local-Cell-Group-InformationList-AuditRsp
                                             ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE-AuditRsp }}
Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
           id-Local-Cell-Group-InformationItem-AuditRsp
                                                                    CRITICALITY
                                                                                    ignore
                                                                                                                    TYPE Local-Cell-Group-
InformationItem-AuditRsp
                                PRESENCE
                                            mandatory}
```

```
Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
   local-Cell-Group-ID
                                           Local-Cell-ID,
   dl-or-global-capacityCredit
                                           DL-or-Global-CapacityCredit,
   ul-capacityCredit
                                           UL-CapacityCredit
                                                                                OPTIONAL,
   commnonChannelsCapacityConsumptionLaw
                                           CommonChannelsCapacityConsumptionLaw,
   dedicatedChannelsCapacityConsumptionLaw
                                           DedicatedChannelsCapacityConsumptionLaw,
                                           ProtocolExtensionContainer {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}
   iE-Extensions
                                                                                                                         OPTIONAL,
Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ****************
-- AUDIT FAILURE
  AuditFailure ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{AuditFailure-IEs}},
                         ProtocolExtensionContainer {{AuditFailure-Extensions}}
   protocolExtensions
                                                                                    OPTIONAL,
AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                           CRITICALITY
                                                          ignore
                                                                         TYPE
                                                                                Cause
                                                                                                                    PRESENCE mandatory
          id-CriticalityDiagnostics
                                                                                CriticalityDiagnostics
    { ID
                                           CRITICALITY
                                                          ignore
                                                                         TYPE
                                                                                                            PRESENCE optional },
   . . .
AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT INITIATION REQUEST
        *************
CommonMeasurementInitiationRequest ::= SEQUENCE {
                                               {{CommonMeasurementInitiationRequest-IEs}},
   protocolIEs
                         ProtocolIE-Container
   protocolExtensions
                         ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}
                                                                                                            OPTIONAL,
CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID
         id-MeasurementID
                                                       CRITICALITY reject
                                                                                TYPE
                                                                                       MeasurementID
                                                                                                                          PRESENCE
   mandatory } |
```

```
CRITICALITY reject
    { ID
           id-CommonMeasurementObjectType-CM-Rqst
                                                                                      TYPE
                                                                                              CommonMeasurementObjectType-CM-Rqst
                                                                                                                                      PRESENCE
    mandatory } |
    -- This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
           id-CommonMeasurementType
                                                           CRITICALITY reject
                                                                                      TYPE
                                                                                              CommonMeasurementType
                                                                                                                                PRESENCE mandatory
    { ID
           id-MeasurementFilterCoefficient
                                                                                              MeasurementFilterCoefficient
                                                                                                                                   PRESENCE
                                                           CRITICALITY reject
                                                                                      TYPE
    optional
    { ID
           id-ReportCharacteristics
                                                           CRITICALITY reject
                                                                                      TYPE
                                                                                              ReportCharacteristics
                                                                                                                                PRESENCE mandatory
                                                                                      TYPE
                                                                                              FNReportingIndicator
     ID
           id-SFNReportingIndicator
                                                           CRITICALITY reject
                                                                                                                                PRESENCE mandatory
                                                                                      TYPE
                                                                                                                                PRESENCE optional
     ID
           id-SFN
                                                           CRITICALITY reject
                                                                                              SFN
    . . .
CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-CommonMeasurementAccuracy
                                                           CRITICALITY reject
                                                                                      EXTENSION CommonMeasurementAccuracy
                                                                                                                                PRESENCE optional }
CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
    cell
                                   Cell-CM-Rast,
    rACH
                                   RACH-CM-Rost,
    CPCH
                                   CPCH-CM-Rqst,
    . . .
Cell-CM-Rast ::= SEQUENCE {
    c-ID
                                   C-ID,
    timeSlot
                                   TimeSlot
                                               OPTIONAL, -- For 3.84Mcps TDD only
    iE-Extensions
                                   ProtocolExtensionContainer { CellItem-CM-Rqst-ExtIEs} }
                                                                                                                  OPTIONAL,
Cellitem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-TimeSlotLCR-CM-Rgst
                                   CRITICALITY reject
                                                           EXTENSION TimeSlotLCR
                                                                                          PRESENCE optional
                                                                                                                 } | -- For 1.28Mcps TDD only
    {ID id-NeighbouringCellMeasurementInformation
                                                                                  EXTENSION NeighbouringCellMeasurementInformation
                                                       CRITICALITY ignore
                                                                                                                                        PRESENCE
optional },
    . . .
RACH-CM-Rqst ::= SEQUENCE {
                                   C-ID,
    commonTransportChannelID
                                   CommonTransportChannelID,
   iE-Extensions
                                   OPTIONAL,
RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
CPCH-CM-Rgst ::= SEQUENCE {
                                  C-ID.
   commonTransportChannelID
                                  CommonTransportChannelID,
   spreadingfactor
                                  MinUL-ChannelisationCodeLength
                                                                    OPTIONAL.
                                  ProtocolExtensionContainer { { CPCHItem-CM-Rqst-ExtIEs} }
   iE-Extensions
                                                                                                             OPTIONAL,
CPCHItem-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-MeasurementID
                                                                               TYPE
                                                                                                                              PRESENCE
   { ID
                                                     CRITICALITY ignore
                                                                                      MeasurementID
   mandatory } |
           id-CommonMeasurementObjectType-CM-Rsp
     ID
                                                    CRITICALITY ignore
                                                                               TYPE
                                                                                      CommonMeasurementObjectType-CM-Rsp
                                                                                                                           PRESENCE optional
          id-SFN
    { ID
                                                    CRITICALITY ignore
                                                                               TYPE
                                                                                                                                   PRESENCE
   optional
   { ID
          id-CriticalityDiagnostics
                                                    CRITICALITY ignore
                                                                               TYPE
                                                                                      CriticalityDiagnostics
                                                                                                                        PRESENCE optional },
   . . .
CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-CommonMeasurementAccuracy
                                                                                                              PRESENCE optional }
                                         CRITICALITY ignore
                                                                EXTENSION CommonMeasurementAccuracy
CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
   cell
                              Cell-CM-Rsp,
   rACH
                              RACH-CM-Rsp,
   cPCH
                              CPCH-CM-Rsp,
Cell-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                                  CommonMeasurementValue,
                                  ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs} }
   iE-Extensions
                                                                                                             OPTIONAL,
   . . .
```

```
CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                               CommonMeasurementValue,
                               ProtocolExtensionContainer { { RACHItem-CM-Rsp-ExtIEs} }
   iE-Extensions
                                                                                                     OPTIONAL,
RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPCH-CM-Rsp ::= SEQUENCE {
                               CommonMeasurementValue,
   commonMeasurementValue
   iE-Extensions
                               ProtocolExtensionContainer { { CPCHItem-CM-Rsp-ExtIEs} }
                                                                                                     OPTIONAL,
   . . .
CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ *********************
-- COMMON MEASUREMENT INITIATION FAILURE
        CommonMeasurementInitiationFailure ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{CommonMeasurementInitiationFailure-IEs}},
                        ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}}
                                                                                                       OPTIONAL,
   protocolExtensions
CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
          id-MeasurementID
                                      CRITICALITY
                                                    ignore
                                                                  TYPE
                                                                         MeasurementID
                                                                                                            PRESENCE mandatory
    ID
         id-Cause
                                      CRITICALITY
                                                    ignore
                                                                  TYPE
                                                                         Cause
                                                                                                            PRESENCE mandatory
         id-CriticalityDiagnostics
                                                                         CriticalityDiagnostics
                                                                                                       PRESENCE optional },
   { ID
                                      CRITICALITY
                                                    ignore
                                                                  TYPE
CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- COMMON MEASUREMENT REPORT
__ **********************************
```

```
CommonMeasurementReport ::= SEOUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                  {{CommonMeasurementReport-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}
                                                                                                                OPTIONAL,
CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
    { ID
          id-MeasurementID
                                                      CRITICALITY ignore
                                                                                 TYPE
                                                                                         MeasurementID
                                                                                                                                 PRESENCE
   mandatory } |
    { ID
          id-CommonMeasurementObjectType-CM-Rprt
                                                                                 TYPE
                                                      CRITICALITY ignore
                                                                                         CommonMeasurementObjectType-CM-Rprt PRESENCE mandatory
                                                                                 TYPE
                                                                                                                                      PRESENCE
    { ID
          id-SFN
                                                      CRITICALITY ignore
   optional },
   . . .
CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
                                  Cell-CM-Rprt,
   rACH
                                  RACH-CM-Rprt,
   cPCH
                                  CPCH-CM-Rprt,
    . . .
Cell-CM-Rprt ::= SEQUENCE {
   \verb|commonMeasurementValueInformation| CommonMeasurementValueInformation|,
                                  ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}
   iE-Extensions
                                                                                                                OPTIONAL,
CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RACH-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
                                  OPTIONAL,
   iE-Extensions
RACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CPCH-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
   iE-Extensions
                                  ProtocolExtensionContainer {{    CPCHItem-CM-Rprt-ExtIEs }}
                                                                                                                  OPTIONAL,
```

```
CPCHItem-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-MeasurementID
                                CRITICALITY
                                             ignore
                                                             TYPE
                                                                    Measurement.ID
                                                                                                  PRESENCE mandatory },
   . . .
CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- COMMON MEASUREMENT FAILURE INDICATION
  *****************
CommonMeasurementFailureIndication ::= SEOUENCE {
                                         {{CommonMeasurementFailureIndication-IEs}},
   protocolIEs
              ProtocolIE-Container
                         ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                     OPTIONAL,
CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
         id-MeasurementID
                                CRITICALITY ignore
                                                       TYPE
                                                             MeasurementID
                                                                                              PRESENCE mandatory
   { ID
                                CRITICALITY ignore
         id-Cause
                                                       TYPE
                                                                                              PRESENCE mandatory
                                                             Cause
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-Local-Cell-ID
                                                                                                                TYPE Local-Cell-ID
                                                                  CRITICALITY
                                                                                  reject
               PRESENCE
                           mandatory }|
    { ID
           id-C-ID
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                 TYPE C-ID
           PRESENCE
                    mandatory }|
           id-ConfigurationGenerationID
                                                                                  reject
                                                                                                                 TYPE ConfigurationGenerationID
                                                                  CRITICALITY
                   PRESENCE
                              mandatory
    { ID
           id-T-Cell
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                 TYPE T-Cell
                           mandatory } |
               PRESENCE
           id-UARFCNforNu
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                 TYPE UARFCN
               PRESENCE
                           mandatory
    { ID
           id-UARFCNforNd
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                 TYPE UARFON
               PRESENCE
                          mandatory }|
           id-MaximumTransmissionPower
                                                                                                                 TYPE MaximumTransmissionPower
    { ID
                                                                  CRITICALITY
                                                                                  reject
                   PRESENCE
                              mandatory } |
    { ID
           id-Closed-Loop-Timing-Adjustment-Mode
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                 TYPE
    Closedlooptimingadjustmentmode
                                                  PRESENCE
                                                              optional
    { ID
           id-PrimaryScramblingCode
                                                                                                                 TYPE PrimaryScramblingCode
                                                                  CRITICALITY
                                                                                  reject
                   PRESENCE
                              mandatory }|
           id-Synchronisation-Configuration-Cell-SetupRqst
                                                                                                                 TYPE Synchronisation-
    { ID
                                                                  CRITICALITY
                                                                                  reject
Configuration-Cell-SetupRqst
                                      PRESENCE
                                                  mandatory } |
    { ID id-DL-TPC-Pattern01Count
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                   TYPE DL-TPC-Pattern01Count
                       PRESENCE
                                  mandatory }|
           id-PrimarySCH-Information-Cell-SetupRqstFDD
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                 TYPE PrimarySCH-Information-
                           PRESENCE
Cell-SetupRqstFDD
                                      mandatory }
           id-SecondarySCH-Information-Cell-SetupRqstFDD
                                                                  CRITICALITY
                                                                                  reject
                                                                                                                 TYPE SecondarySCH-Information-
Cell-SetupRqstFDD
                       PRESENCE
                                  mandatory }|
    { ID id-PrimaryCPICH-Information-Cell-SetupRqstFDD
                                                                                  reject
                                                                                                                 TYPE PrimaryCPICH-Information-
                                                                  CRITICALITY
Cell-SetupRqstFDD
                       PRESENCE
                                  mandatory } |
          id-SecondaryCPICH-InformationList-Cell-SetupRgstFDD
                                                                                                                 TYPE SecondaryCPICH-
    { ID
                                                                  CRITICALITY
                                                                                  reject
InformationList-Cell-SetupRqstFDD
                                      PRESENCE
                                                  optional }|
           id-PrimaryCCPCH-Information-Cell-SetupRqstFDD
                                                                                                                 TYPE PrimaryCCPCH-Information-
                                                                  CRITICALITY
                                                                                  reject
Cell-SetupRgstFDD
                       PRESENCE
                                  mandatory } |
    { ID id-Limited-power-increase-information-Cell-SetupRqstFDD CRITICALITY
                                                                                                                 TYPE Limited-power-increase-
                                                                                  reject
information-Cell-SetupRqstFDD
                                   PRESENCE
                                              mandatory },
   . . .
CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-IPDLParameter-Information-Cell-SetupRqstFDD
                                                                                                                   IPDLParameter-Information-
                                                                  CRITICALITY
                                                                                  reject
                                                                                             EXTENSION
Cell-SetupRgstFDD
                       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-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    secondarySCH-Power
                                            DL-Power,
    tSTD-Indicator
                                            TSTD-Indicator,
                                            ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
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-SetupRqstFDD }}
SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
```

```
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD
                                                                     CRITICALITY
                                                                                                                     TYPE SecondaryCPICH-
                                                                                     reject
InformationItem-Cell-SetupRqstFDD
                                        PRESENCE
                                                    mandatory}
SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    dl-ScramblingCode
                                            DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber.
    secondaryCPICH-Power
                                            DI-Power.
    transmitDiversityIndicator
                                            TransmitDiversityIndicator,
                                            ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
SecondaryCPICH-InformationItem-Cell-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE
    commonPhysicalChannelID
                                            CommonPhysicalChannelID,
    bCH-information
                                            BCH-Information-Cell-SetupRqstFDD,
    sTTD-Indicator
                                            STTD-Indicator,
                                            ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
BCH-Information-Cell-SetupRgstFDD ::= SEQUENCE {
    commonTransportChannelID
                                            CommonTransportChannelID,
    bCH-Power
                                            DL-Power,
                                            ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} }
    iE-Extensions
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-SetupRgstFDD-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.
   iE-Extensions
                                         ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs} }
                                                                                                                              OPTIONAL,
IPDLParameter-Information-Cell-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- CELL SETUP REQUEST TDD
  *****************
CellSetupRequestTDD ::= SEQUENCE {
                                                 {{CellSetupRequestTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}
                                                                                           OPTIONAL,
CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-ID
                                                                                                              Local-Cell-ID
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
       PRESENCE mandatory } |
             id-C-ID
                                                                                                              C-ID
       { ID
                                                                                           TYPE
                                                                CRITICALITY
                                                                                reject
    PRESENCE
               mandatory }|
          id-ConfigurationGenerationID
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
                                                                                                              ConfigurationGenerationID
           PRESENCE mandatory } |
    { ID
           id-UARFCNforNt
                                                                CRITICALITY
                                                                               reject
                                                                                           TYPE
                                                                                                              UARECN
       PRESENCE
                  mandatory } |
           id-CellParameterID
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
                                                                                                              CellParameterID
           PRESENCE
                      mandatory }|
           id-MaximumTransmissionPower
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
                                                                                                              MaximumTransmissionPower
           PRESENCE
                      mandatory }
           id-TransmissionDiversityApplied
                                                                                       TYPE
                                                                                                              TransmissionDiversityApplied
    { ID
                                                            CRITICALITY
                                                                            reject
           PRESENCE
                      mandatory }
   { ID
           id-SyncCase
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
                                                                                                              SyncCase
    PRESENCE
               mandatory } |
    { ID
           id-Synchronisation-Configuration-Cell-SetupRqst
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
                                                                                                              Synchronisation-Configuration-
Cell-SetupRqst
                  PRESENCE
                             mandatory }
                                                                                                              ConstantValue
    { ID
           id-DPCHConstant
                                                                            reject
                                                                                       TYPE
                                                            CRITICALITY
           PRESENCE
                      mandatory
           id-PUSCHConstant
                                                            CRITICALITY
                                                                           reject
                                                                                       TYPE
                                                                                                              ConstantValue
           PRESENCE
                      mandatory
           id-PRACHConstant
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
                                                                                                              ConstantValue
           PRESENCE
                      mandatory
           id-TimingAdvanceApplied
                                                                                                              TimingAdvanceApplied
    { ID
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
           PRESENCE
                     mandatory }|
    { ID
           id-SCH-Information-Cell-SetupRqstTDD
                                                            CRITICALITY
                                                                            reject
                                                                                       TYPE
                                                                                                              SCH-Information-Cell-SetupRqstTDD
                        optional
                                     } -- Mandatory for 3.84Mcps TDD only
```

```
id-PCCPCH-Information-Cell-SetupRqstTDD
                                                           CRITICALITY
                                                                                                            PCCPCH-Information-Cell-
                                                                           reject
                                                                                      TYPE
SetupRqstTDD
                         PRESENCE
                                     optional
                                               } | -- Mandatory for 3.84Mcps TDD only
   { ID
          id-TimeSlotConfigurationList-Cell-SetupRastTDD
                                                           CRITICALITY
                                                                                      TYPE
                                                                                                            TimeSlotConfigurationList-Cell-
SetupRastTDD
                  PRESENCE
                             optional
                                       }, -- Mandatory for 3.84Mcps TDD only
CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD
                                                               CRITICALITY
                                                                               reject
                                                                                          EXTENSION
                                                                                                            TimeSlotConfigurationList-LCR-
Cell-SetupRastTDD
                      PRESENCE
                                 optional } -- Mandatory for 1.28Mcps TDD only
   { ID
          id-PCCPCH-LCR-Information-Cell-SetupRqstTDD
                                                                                                            PCCPCH-LCR-Information-Cell-
                                                               CRITICALITY
                                                                               reject
                                                                                          EXTENSION
SetupRastTDD
                          PRESENCE
                                     optional
                                                } -- Mandatory for 1.28Mcps TDD only
                                                                                                            DwPCH-LCR-Information-Cell-
    { ID
          id-DwPCH-LCR-Information-Cell-SetupRgstTDD
                                                               CRITICALITY
                                                                               reiect
                                                                                          EXTENSION
SetupRastTDD
                          PRESENCE
                                     optional
                                                } -- Mandatory for 1.28Mcps TDD only
          id-ReferenceSFNoffset
                                     CRITICALITY
                                                    ignore
                                                                   EXTENSION ReferenceSFNoffset
                                                                                                                 PRESENCE optional } |
     ID
         id-IPDLParameter-Information-Cell-SetupRgstTDD
                                                                CRITICALITY
                                                                               reject
                                                                                          EXTENSION
                                                                                                               IPDLParameter-Information-
Cell-SetupRgstTDD PRESENCE
                             optional },
SCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                         CommonPhysicalChannelID,
   svncCaseIndicator
                                         SyncCaseIndicator-Cell-SetupRgstTDD-PSCH,
   sCH-Power
                                         DL-Power.
   tSTD-Indicator
                                         TSTD-Indicator,
                                         ProtocolExtensionContainer { { SCH-Information-Cell-SetupRgstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
SCH-Information-Cell-SetupRqstTDD-ExtIEs 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-SetupRgstTDD-PSCH ::= CHOICE
   case1
                                     Case1-Cell-SetupRqstTDD,
   case2
                                     Case2-Cell-SetupRqstTDD,
    . . .
Case1-Cell-SetupRqstTDD ::= SEQUENCE {
   timeSlot
                                     TimeSlot,
                                     ProtocolExtensionContainer { { CaselItem-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                               OPTIONAL,
```

```
CaselItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Case2-Cell-SetupRgstTDD ::= SEQUENCE {
    sCH-TimeSlot
                                        SCH-TimeSlot,
    iE-Extensions
                                        ProtocolExtensionContainer { Case2Item-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                        OPTIONAL,
Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-Information-Cell-SetupRgstTDD ::= SEQUENCE
                                            CommonPhysicalChannelID,
    commonPhysicalChannelID
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset,
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    pCCPCH-Power
                                            PCCPCH-Power,
   blockSTTD-Indicator
                                            BlockSTTD-Indicator,
                                            ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                              OPTIONAL,
    . . .
PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD
TimeSlotConfigurationItem-Cell-SetupRqstTDD ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    timeSlotStatus
                                            TimeSlotStatus,
    timeSlotDirection
                                            TimeSlotDirection,
    iE-Extensions
                                            ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs} }
                                                                                                                                       OPTIONAL,
    . . .
TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    timeSlotStatus
                                            TimeSlotStatus,
    timeSlotDirection
                                            TimeSlotDirection,
                                            ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                          OPTIONAL,
    . . .
```

```
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-LCR-Information-Cell-SetupRgstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                          CommonPhysicalChannelID,
                                          TDD-PhysicalChannelOffset,
   tdd-PhysicalChannelOffset
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   pCCPCH-Power
                                          PCCPCH-Power,
   blockSTTD-Indicator
                                          BlockSTTD-Indicator,
   tSTD-Indicator
                                          TSTD-Indicator,
                                          ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                             OPTIONAL,
PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
                                  CommonPhysicalChannelID,
   commonPhysicalChannelId
   tSTD-Indicator
                                  TSTD-Indicator,
   sYNCDlCodeId
                                  SYNCDlCodeId,
   dwPCH-Power
                                  DwPCH-Power,
                                  ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
DwPCH-LCR-Information-Cell-SetupRgstTDD-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 ::= {
  ****************
-- CELL SETUP RESPONSE
__ ********************************
CellSetupResponse ::= SEOUENCE
   protocolIEs
                              ProtocolIE-Container
                                                     {{CellSetupResponse-IEs}},
```

```
protocolExtensions
                            ProtocolExtensionContainer {{CellSetupResponse-Extensions}}
                                                                                                         OPTIONAL,
CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
          id-CriticalityDiagnostics
                                       CRITICALITY
                                                                    TYPE
                                                                            CriticalityDiagnostics
                                                                                                           PRESENCE optional },
                                                      ignore
CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- CELL SETUP FAILURE
__ ********************
CellSetupFailure ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{CellSetupFailure-IEs}},
                         ProtocolExtensionContainer {{CellSetupFailure-Extensions}}
   protocolExtensions
                                                                                       OPTIONAL,
CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                           CRITICALITY
                                                          ignore
                                                                        TYPE
                                                                                                                   PRESENCE mandatory
                                                                                Cause
          id-CriticalityDiagnostics
   { ID
                                           CRITICALITY
                                                          ignore
                                                                        TYPE
                                                                                CriticalityDiagnostics
                                                                                                           PRESENCE optional },
CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- CELL RECONFIGURATION REQUEST FDD
__ ********************************
CellReconfigurationRequestFDD ::= SEQUENCE {
                                              {{CellReconfigurationRequestFDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{CellReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                                           OPTIONAL,
CellReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-C-ID
                                                             CRITICALITY reject
                                                                                       TYPE
                                                                                                         C-ID
       PRESENCE
                 mandatory }|
          id-ConfigurationGenerationID
                                                             CRITICALITY reject
                                                                                       TYPE
                                                                                                         ConfigurationGenerationID
              PRESENCE
                       mandatory }|
```

```
SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Information-Cell-ReconfRqstFDD ::= SEQUENCE
                                          CommonPhysicalChannelID,
    commonPhysicalChannelID
   primaryCPICH-Power
                                          PrimaryCPICH-Power,
   iE-Extensions
                                          ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SecondaryCPICH-InformationList-Cell-ReconfRgstFDD ::= SEOUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-ReconfRgstFDD }}
SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
           id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD
                                                                     CRITICALITY
                                                                                                                  TYPE SecondaryCPICH-
                                                                                     reject
InformationItem-Cell-ReconfRqstFDD
                                      PRESENCE
                                                  mandatory}
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD ::= SEOUENCE {
    commonPhysicalChannelID
                                              CommonPhysicalChannelID,
   secondaryCPICH-Power
                                              DL-Power,
                                              ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
   bCH-information
                                          BCH-information-Cell-ReconfRqstFDD,
                                          ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
BCH-information-Cell-ReconfRqstFDD ::= SEQUENCE {
   commonTransportChannelID
                                          CommonTransportChannelID,
   bCH-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,
                                        ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                           OPTIONAL,
IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ****************
-- CELL RECONFIGURATION REQUEST TDD
  *****************
CellReconfigurationRequestTDD ::= SEQUENCE {
                                               {{CellReconfigurationRequestTDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
                         ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
CellReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
   { ID id-C-ID
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                           C-ID
   PRESENCE mandatory }
   { ID id-ConfigurationGenerationID
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                           ConfigurationGenerationID
          PRESENCE mandatory }
          id-Synchronisation-Configuration-Cell-ReconfRqst
   { ID
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                            Synchronisation-Configuration-
Cell-ReconfRqst PRESENCE optional
   { ID id-TimingAdvanceApplied
                                                                          reject
                                                                                                           TimingAdvanceApplied
                                                           CRITICALITY
                                                                                     TYPE
       PRESENCE optional } | -- For 3.84Mcps TDD only
   { ID id-SCH-Information-Cell-ReconfRqstTDD
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                           SCH-Information-Cell-
                 PRESENCE optional } | -- For 3.84Mcps TDD only
ReconfRqstTDD
   { ID id-PCCPCH-Information-Cell-ReconfRqstTDD
                                                           CRITICALITY
                                                                                     TYPE
                                                                                                           PCCPCH-Information-Cell-
                                                                          reject
ReconfRqstTDD
                      PRESENCE
                                 optional }|
          id-MaximumTransmissionPower
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                           MaximumTransmissionPower
           PRESENCE
                     optional
   { ID
          id-DPCHConstant
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                           Constant Value
           PRESENCE
                     optional
          id-PUSCHConstant
                                                                                     TYPE
                                                                                                           ConstantValue
   { ID
                                                           CRITICALITY
                                                                          reject
           PRESENCE
                         optional
   { ID
          id-PRACHConstant
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                           ConstantValue
           PRESENCE
                      optional }
   { ID
          id-TimeSlotConfigurationList-Cell-ReconfRqstTDD
                                                           CRITICALITY
                                                                          reject
                                                                                     TYPE
                                                                                                           TimeSlotConfigurationList-Cell-
                  PRESENCE optional }, -- For 3.84Mcps TDD only
ReconfRastTDD
   . . .
CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD
                                                                 CRITICALITY
                                                                                                               TimeSlotConfigurationList-LCR-
                                                                                 reject
                                                                                            EXTENSION
Cell-ReconfRgstTDD PRESENCE optional | -- Mandatory for 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-Cell-ReconfRgstTDD
                                                         CRITICALITY
                                                                                                               DwPCH-LCR-Information-Cell-
                                                                         reject
                                                                                    EXTENSION
ReconfRast.TDD
                   PRESENCE optional | -- Mandatory for 1.28Mcps TDD only
          id-IPDLParameter-Information-Cell-ReconfRqstTDD
                                                                 CRITICALITY
                                                                                                                  IPDLParameter-Information-
                                                                                reject
                                                                                            EXTENSION
Cell-ReconfRqstTDD PRESENCE
                              optional },
SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
   commonPhysicalChannelID
                                          CommonPhysicalChannelID,
    sCH-Power
                                          DL-Power,
                                          ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                       OPTIONAL,
PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE
   commonPhysicalChannelID
                                          CommonPhysicalChannelID,
   pCCPCH-Power
                                          DL-Power,
   iE-Extensions
                                          ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs} } 
                                                                                                                          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
TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD
TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR
                                          TimeSlotLCR,
    timeSlotStatus
                                          TimeSlotStatus,
    timeSlotDirection
                                          TimeSlotDirection,
   iE-Extensions
                                          ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs} }
```

```
TimeSlotConfigurationItem-LCR-Cell-ReconfRgstTDD-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-ReconfRqstTDD ::= SEQUENCE
   iPDL-TDD-Parameters
                                       IPDL-TDD-Parameters
                                                           OPTIONAL,
   iPDL-Indicator
                                       IPDL-Indicator,
   iE-Extensions
                                    ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs} }
                                                                                                              OPTIONAL,
IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- CELL RECONFIGURATION RESPONSE
  *****************
CellReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                              {{CellReconfigurationResponse-IEs}},
                          ProtocolExtensionContainer {{CellReconfigurationResponse-Extensions}}
   protocolExtensions
                                                                                                  OPTIONAL,
CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
         id-CriticalityDiagnostics
                                    CRITICALITY
                                                 ignore
                                                               TYPE
                                                                     CriticalityDiagnostics
                                                                                                  PRESENCE optional },
   . . .
CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- CELL RECONFIGURATION FAILURE
```

mandatory

```
__ *******************
CellReconfigurationFailure ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{CellReconfigurationFailure-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{CellReconfigurationFailure-Extensions}}
                                                                                                       OPTIONAL,
CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    ID
          id-Cause
                                      CRITICALITY
                                                    ignore
                                                                  TYPE
                                                                         Cause
                                                                                                               PRESENCE
   { ID
          id-CriticalityDiagnostics
                                      CRITICALITY
                                                    ignore
                                                                  TYPE
                                                                         CriticalityDiagnostics
                                                                                                          PRESENCE optional },
   . . .
CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
__ ********************
-- CELL DELETION REQUEST
__ *********************
CellDeletionRequest ::= SEQUENCE {
                                             {{CellDeletionRequest-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}
                                                                                    OPTIONAL,
CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
   { ID
                        CRITICALITY
                                      reject
                                                           C-ID
                                                                      PRESENCE
                                                                                mandatory},
   . . .
CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
__ ********************************
-- CELL DELETION RESPONSE
__ **********************
CellDeletionResponse ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{CellDeletionResponse-IEs}},
                        ProtocolExtensionContainer {{CellDeletionResponse-Extensions}}
   protocolExtensions
                                                                                    OPTIONAL,
   . . .
CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
```

```
Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    mandatory }
Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
   local-CellID
                                            Local-Cell-ID,
   addorDeleteIndicator
                                            AddorDeleteIndicator,
   dl-or-global-capacityCredit
                                            DL-or-Global-CapacityCredit
                                                                         OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
   ul-capacityCredit
                                            UL-CapacityCredit
                                                                  OPTIONAL,
   commnonChannelsCapacityConsumptionLaw
                                            CommonChannelsCapacityConsumptionLaw
                                                                                 OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
   dedicatedChannelsCapacityConsumptionLaw
                                            DedicatedChannelsCapacityConsumptionLaw
                                                                                    OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
   maximumDL-PowerCapability
                                            MaximumDL-PowerCapability
                                                                         OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
   minSpreadingFactor
                                            MinSpreadingFactor
                                                                             OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
   minimumDL-PowerCapability
                                            MinimumDL-PowerCapability
                                                                         OPTIONAL,
   -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
   local-Cell-Group-ID
                                            Local-Cell-ID
                                                                         OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL.
Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-ResourceStatusInd
                                                       CRITICALITY ignore
                                                                             EXTENSION
                                                                                        FPACH-LCR-InformationList-ResourceStatusInd
   PRESENCE optional } | -- for 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-ResourceStatusInd CRITICALITY ignore
                                                                      EXTENSION
                                                                                DwPCH-LCR-Information-ResourceStatusInd
                                                                                                                       PRESENCE optional
    } | -- for 1.28Mcps TDD only
    { ID id-ReferenceClockAvailability
                                            CRITICALITY
                                                                         EXTENSION ReferenceClockAvailability
                                                                                                                  PRESENCE optional },
                                                           ignore
   -- This IE shall be present if AddorDeleteIndicator IE is set to "add" and the Local Cell is related to a TDD cell
Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE-ResourceStatusInd }}
Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
Local-Cell-Group-InformationItem-ResourceStatusInd::= SEQUENCE {
   local-Cell-Group-ID
                                            Local-Cell-ID,
   dl-or-global-capacityCredit
                                            DL-or-Global-CapacityCredit,
   ul-capacityCredit
                                            UL-CapacityCredit
                                                                  OPTIONAL,
   commnonChannelsCapacityConsumptionLaw
                                            CommonChannelsCapacityConsumptionLaw,
   dedicatedChannelsCapacityConsumptionLaw
                                            DedicatedChannelsCapacityConsumptionLaw,
   iE-Extensions
                                            ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} }OPTIONAL,
```

```
Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
   local-Cell-InformationList
                                        Local-Cell-InformationList2-ResourceStatusInd OPTIONAL,
   local-Cell-Group-InformationList
                                        Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
   cCP-InformationList
                                        CCP-InformationList-ResourceStatusInd
                                                                                    OPTIONAL,
   cell-InformationList
                                        Cell-InformationList-ResourceStatusInd
                                                                                    OPTIONAL,
   iE-Extensions
                                        ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs} }
                                                                                                                     OPTIONAL,
ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
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 ::= SEOUENCE {
   local-Cell-ID
                                        Local-Cell-ID,
   dl-or-global-capacityCredit
                                        DL-or-Global-CapacityCredit
                                                                      OPTIONAL,
   ul-capacityCredit
                                        UL-CapacityCredit
                                                                      OPTIONAL,
   commnonChannelsCapacityConsumptionLaw
                                            CommonChannelsCapacityConsumptionLaw
                                                                                 OPTIONAL,
   dedicatedChannelsCapacityConsumptionLaw
                                            DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
   maximum-DL-PowerCapability
                                        MaximumDL-PowerCapability
                                                                      OPTIONAL,
   minSpreadingFactor
                                        MinSpreadingFactor
                                                                      OPTIONAL,
   minimumDL-PowerCapability
                                        MinimumDL-PowerCapability
                                                                      OPTIONAL,
   iE-Extensions
                                        ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs} }
                                                                                                                          OPTIONAL,
   . . .
Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID
          id-ReferenceClockAvailability
                                            CRITICALITY
                                                           ignore
                                                                          EXTENSION ReferenceClockAvailability
                                                                                                                  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.
   commnonChannelsCapacityConsumptionLaw
                                            CommonChannelsCapacityConsumptionLaw
   dedicatedChannelsCapacityConsumptionLaw
                                            DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
                                        ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
   . . .
Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCP-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-
ResourceStatusInd }}
CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory
CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
   communicationControlPortID
                                        CommunicationControlPortID,
   resourceOperationalState
                                        ResourceOperationalState,
   availabilityStatus
                                        AvailabilityStatus,
   iE-Extensions
                                        ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs} }
                                                                                                                     OPTIONAL,
CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-
ResourceStatusInd }}
Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
Cell-InformationItem-ResourceStatusInd ::= SEOUENCE {
   c-ID
                                        C-ID.
   resourceOperationalState
                                        ResourceOperationalState
                                                                                    OPTIONAL,
   availabilityStatus
                                        AvailabilityStatus
                                                                                    OPTIONAL,
   primary-SCH-Information
                                        P-SCH-Information-ResourceStatusInd
                                                                                    OPTIONAL,
                                        S-SCH-Information-ResourceStatusInd
   secondary-SCH-Information
                                                                                    OPTIONAL,
   primary-CPICH-Information
                                        P-CPICH-Information-ResourceStatusInd
                                                                                    OPTIONAL,
   secondary-CPICH-Information
                                        S-CPICH-InformationList-ResourceStatusInd
                                                                                    OPTIONAL,
                                        P-CCPCH-Information-ResourceStatusInd
   primary-CCPCH-Information
                                                                                    OPTIONAL,
   bCH-Information
                                        BCH-Information-ResourceStatusInd
                                                                                    OPTIONAL,
   secondary-CCPCH-InformationList
                                        S-CCPCH-InformationList-ResourceStatusInd
                                                                                    OPTIONAL,
   pCH-Information
                                        PCH-Information-ResourceStatusInd
                                                                                     OPTIONAL,
   pICH-Information
                                        PICH-Information-ResourceStatusInd
                                                                                    OPTIONAL,
```

```
fACH-InformationList
                                       FACH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL,
   pRACH-InformationList
                                       PRACH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL,
   rACH-InformationList
                                       RACH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL.
   aICH-InformationList
                                       AICH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL,
                                       PCPCH-InformationList-ResourceStatusInd
   pCPCH-InformationList
                                                                                  OPTIONAL,
   cPCH-InformationList
                                       CPCH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL,
   aP-AICH-InformationList
                                       AP-AICH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL,
   cDCA-ICH-InformationList
                                       CDCA-ICH-InformationList-ResourceStatusInd
                                                                                  OPTIONAL,
   sCH-Information
                                       SCH-Information-ResourceStatusInd
                                                                                  OPTIONAL,
   iE-Extensions
                                       ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}
P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}
S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}
P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-P-CPICH-Information CRITICALITY ignore
                                                 TYPE Common-PhysicalChannel-Status-Information
                                                                                                          PRESENCE mandatory }
S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-
ResourceStatusInd }}
S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-S-CPICH-Information CRITICALITY ignore
                                                TYPE Common-PhysicalChannel-Status-Information
                                                                                                          PRESENCE mandatory }
P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}
P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-P-CCPCH-Information CRITICALITY ignore
                                                TYPE Common-PhysicalChannel-Status-Information
                                                                                                          PRESENCE mandatory }
BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}
BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

```
S-CCPCH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
ResourceStatusInd }}
S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE mandatory }
PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}
PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE mandatory }
PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}
PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE mandatory }
FACH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-
ResourceStatusInd }}
FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE mandatory }
PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-
ResourceStatusInd }}
PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE mandatory }
RACH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-
ResourceStatusInd }}
RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE mandatory }
AICH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-
ResourceStatusInd }}
AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE mandatory }
PCPCH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-
ResourceStatusInd }}
PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  PRESENCE optional }
```

```
CPCH-InformationList-ResourceStatusInd ::= SEOUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-
ResourceStatusInd }}
CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE optional }
AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-
ResourceStatusInd }}
AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-AP-AICH-Information CRITICALITY ignore
                                           TYPE Common-PhysicalChannel-Status-Information
                                                                                                PRESENCE optional }
CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-
ResourceStatusInd }}
CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE optional }
SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}
SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (0..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 }}
DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
   { ID id-DwPCH-LCR-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information
                                                                                                PRESENCE mandatory }
-- SYSTEM INFORMATION UPDATE REQUEST
    *****************
SystemInformationUpdateRequest ::= SEOUENCE {
   protocolIEs
                      ProtocolIE-Container
                                         {{SystemInformationUpdateRequest-IEs}},
   protocolExtensions
                      ProtocolExtensionContainer {{SystemInformationUpdateRequest-Extensions}}
                                                                                                OPTIONAL,
```

```
SystemInformationUpdateRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID
          id-C-ID
                                                            CRITICALITY reject
                                                                                   TYPE
                                                                                          C-ID
   PRESENCE mandatory } |
     ID
           id-BCCH-ModificationTime
                                                            CRITICALITY reject
                                                                                          BCCH-ModificationTime
                                                                                                                           PRESENCE optional
                                                                                   TYPE
                                                                CRITICALITY reject
    { ID
          id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst
                                                                                      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
                                        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
                                                          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 ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{SystemInformationUpdateResponse-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{SystemInformationUpdateResponse-Extensions}}
                                                                                                            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 ::= SEOUENCE
   protocolIEs
                         ProtocolIE-Container
                                               {{SystemInformationUpdateFailure-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{SystemInformationUpdateFailure-Extensions}}
                                                                                                            OPTIONAL,
SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                           CRITICALITY
                                                          ignore
                                                                         TYPE
                                                                                Cause
                                                                                                                    PRESENCE mandatory
```

```
{ ID
           id-CriticalityDiagnostics
                                             CRITICALITY
                                                                            TYPE
                                                                                    CriticalityDiagnostics
                                                                                                                 PRESENCE optional },
                                                             ignore
SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
       -- RADIO LINK SETUP REQUEST FDD
__ *********************
RadioLinkSetupRequestFDD ::= SEOUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{RadioLinkSetupRequestFDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                         CRITICALITY reject
                                                                                                              CRNC-CommunicationContextID
                                                                                       TYPE
           PRESENCE
                     mandatory }|
                                                                                                              UL-DPCH-Information-RL-
    { ID
           id-UL-DPCH-Information-RL-SetupRgstFDD
                                                         CRITICALITY reject
                                                                                       TYPE
                      PRESENCE
                                  mandatory } |
SetupRqstFDD
   { ID
           id-DL-DPCH-Information-RL-SetupRqstFDD
                                                         CRITICALITY reject
                                                                                       TYPE
                                                                                                              DL-DPCH-Information-RL-
                      PRESENCE
SetupRastFDD
                                  mandatory }|
     ID
          id-DCH-FDD-Information
                                         CRITICALITY reject
                                                                        TYPE
                                                                                DCH-FDD-Information
                                                                                                                   PRESENCE mandatory
                                                                                DSCH-FDD-Information
                                                                                                                 PRESENCE optional }
          id-DSCH-FDD-Information
                                         CRITICALITY reject
                                                                        TYPE
                                                                                                              TFCI2-Bearer-Information-RL-
     ID
          id-TFCI2-Bearer-Information-RL-SetupRgstFDD
                                                         CRITICALITY ignore
                                                                                       TYPE
SetupRqstFDD
              PRESENCE
                        optional
    { ID id-RL-InformationList-RL-SetupRqstFDD
                                                                                                              RL-InformationList-RL-
                                                         CRITICALITY notify
                                                                                       TYPE
                      PRESENCE
                                  mandatory } |
SetupRastFDD
  { ID id-Transmission-Gap-Pattern-Sequence-Information
                                                                                       TYPE Transmission-Gap-Pattern-Sequence-Information
                                                         CRITICALITY reject
  PRESENCE optional } |
{ ID id-Active-Pattern-Sequence-Information
                                                     CRITICALITY reject
                                                                                   TYPE Active-Pattern-Sequence-Information PRESENCE optional
  },
    . . .
RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
     ID id-DSCH-FDD-Common-Information
                                                     CRITICALITY ignore EXTENSION DSCH-FDD-Common-Information
                                                                                                                            PRESENCE optional
UL-DPCH-Information-RL-SetupRgstFDD ::= SEOUENCE
   ul-ScramblingCode
                                         UL-ScramblingCode,
   minUL-ChannelisationCodeLength
                                         MinUL-ChannelisationCodeLength,
   maxNrOfUL-DPDCHs
                                         MaxNrOfUL-DPDCHs
                                                                OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit
                                         PunctureLimit,
    t.FCS
                                         TFCS,
```

```
ul-DPCCH-SlotFormat
                                            UL-DPCCH-SlotFormat,
    ul-SIR-Target
                                            UL-SIR.
    diversit.vMode
                                            DiversityMode.
    sSDT-CellID-Length
                                            SSDT-CellID-Length
                                                                    OPTIONAL,
    s-FieldLength
                                            S-FieldLength
                                                                    OPTIONAL.
                                            ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRgstFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                            CRITICALITY reject EXTENSION DPC-Mode
    {ID id-DPC-Mode
                                                                        PRESENCE optional },
    . . .
DL-DPCH-Information-RL-SetupRgstFDD ::= SEOUENCE {
    dl-DPCH-SlotFormat
                                            DL-DPCH-SlotFormat,
                                            TFCI-SignallingMode,
    tFCI-SignallingMode
    tFCI-Presence
                                            TFCI-Presence OPTIONAL,
    -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
    multiplexingPosition
                                            MultiplexingPosition,
    pDSCH-RL-ID
                                            RL-ID
                                                            OPTIONAL,
    -- This IE shall be present if the DSCH Information IE is present --
    pDSCH-CodeMapping
                                            PDSCH-CodeMapping
    -- This IE shall be present if the DSCH Information IE is present --
    powerOffsetInformation
                                            PowerOffsetInformation-RL-SetupRqstFDD,
    fdd-TPC-DownlinkStepSize
                                            FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                            LimitedPowerIncrease,
    innerLoopDLPCStatus
                                            InnerLoopDLPCStatus,
                                            ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRgstFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
                                            PowerOffset,
    pO1-ForTFCI-Bits
   pO2-ForTPC-Bits
                                            PowerOffset,
   pO3-ForPilotBits
                                            PowerOffset,
    iE-Extensions
                                            ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCI2-Bearer-Information-RL-SetupRgstFDD ::= SEQUENCE {
    toAWS
                                        ToAWS,
    toAWE
    iE-Extensions
                                        ProtocolExtensionContainer { { TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs} }
                                                                                                                             OPTIONAL,
```

```
TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-SetupRgstFDD ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF
   RL-InformationItemIE-RL-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
          id-RL-InformationItem-RL-SetupRqstFDD
                                                     CRITICALITY
                                                                   notify
                                                                                 TYPE
                                                                                                       RL-InformationItem-RL-
                 PRESENCE
SetupRqstFDD
                            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,
   sSDT-Cell-Identity
                                   SSDT-Cell-Identity
                                                            OPTIONAL,
   transmitDiversityIndicator
                                   TransmitDiversityIndicator
                                                                OPTIONAL,
   -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to "none"
                                   iE-Extensions
                                                                                                         OPTIONAL,
   . . .
RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-Cell-Identity
                                                                              PRESENCE conditional },
   -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
  *************************
-- RADIO LINK SETUP REQUEST TDD
__ *********************
RadioLinkSetupRequestTDD ::= SEQUENCE {
                                              {{RadioLinkSetupRequestTDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}
                                                                                                       OPTIONAL,
```

```
RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                                CRITICALITY reject
                                                                                            TYPE
                                                                                                                    CRNC-CommunicationContextID
                          mandatory }|
                PRESENCE
                                                                                                                    UL-CCTrCH-InformationList-RL-
    { ID
           id-UL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                                CRITICALITY notify
                                                                                            TYPE
SetupRast.TDD
                    PRESENCE
                                optional
                                                                                                                    DL-CCTrCH-InformationList-RL-
    { ID
           id-DL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                                CRITICALITY notify
                                                                                            TYPE
                                            } |
SetupRastTDD
                    PRESENCE
                                optional
      ID
           id-DCH-TDD-Information
                                                CRITICALITY reject
                                                                            TYPE
                                                                                    DCH-TDD-Information
                                                                                                                             PRESENCE optional } |
      TD
           id-DSCH-TDD-Information
                                                CRITICALITY reject
                                                                            TYPE
                                                                                    DSCH-TDD-Information
                                                                                                                          PRESENCE optional }
                                                                                                                          PRESENCE optional }
      TD
           id-USCH-Information
                                            CRITICALITY reject
                                                                        TYPE
                                                                              USCH-Information
           id-RL-Information-RL-SetupRqstTDD
                                                                CRITICALITY reject
                                                                                                                    RL-Information-RL-SetupRqstTDD
     ID
                                                                                            TYPE
                PRESENCE
                           mandatory },
    . . .
RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
    ProtocolIE-Single-Container { UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}
UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
           id-UL-CCTrCH-InformationItem-RL-SetupRgstTDD
                                                                CRITICALITY
                                                                                notify
                                                                                                TYPE
                                                                                                                    UL-CCTrCH-InformationItem-RL-
SetupRqstTDD
                    PRESENCE
                                mandatory}
UL-CCTrCH-InformationItem-RL-SetupRgstTDD ::= SEQUENCE {
    cCTrCH-ID
                                            CCTrCH-ID,
    t.FCS
                                            TFCS,
    tFCI-Coding
                                            TFCI-Coding,
                                            PunctureLimit,
    punctureLimit
    uL-DPCH-Information
                                            UL-DPCH-Information-RL-SetupRqstTDD
                                                                                    OPTIONAL,
                                            ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
     ID id-UL-DPCH-LCR-Information-RL-SetupRgstTDD CRITICALITY notify
                                                                            EXTENSION UL-DPCH-LCR-Information-RL-SetupRgstTDD
                                                                                                                                  PRESENCE optional
    } -- For 1.28Mcps TDD only
                                CRITICALITY reject
    { ID id-UL-SIRTarget
                                                        EXTENSION
                                                                        UL-SIR
                                                                                    PRESENCE optional
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
    . . .
UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}
UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationList-RL-SetupRgstTDD
                                                        CRITICALITY notify TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD
                                                                                                                             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} }
                                                                                                                                OPTIONAL.
UL-DPCH-InformationItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}
UL-DPCH-LCR-InformationIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD
                                                            CRITICALITY notify TYPE UL-DPCH-LCR-InformationItem-RL-SetupRgstTDD
                                                                                                                                      PRESENCE
optional
UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-DPCHOffset
                                            TDD-DPCHOffset,
    uL-TimeslotLCR-Information
                                            UL-TimeslotLCR-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRgstTDD-ExtIEs} }
                                                                                                                                      OPTIONAL,
UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-InformationItemIE-RL-
SetupRqstTDD }}
DL-CCTrCH-InformationItemIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
           id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD
                                                                    CRITICALITY
                                                                                     notify
                                                                                                                     TYPE DL-CCTrCH-InformationItem-
RL-SetupRqstTDD
                    PRESENCE
                                mandatory}
DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                            CCTrCH-ID,
    t.FCS
                                            TFCS.
    tFCI-Coding
                                            TFCI-Coding,
    punctureLimit
                                            PunctureLimit,
                                            TDD-TPC-DownlinkStepSize,
    tdd-TPC-DownlinkStepSize
    cCTrCH-TPCList
                                            CCTrCH-TPCList-RL-SetupRqstTDD
                                                                                     OPTIONAL,
    dL-DPCH-Information
                                            DL-DPCH-Information-RL-SetupRgstTDD
                                                                                     OPTIONAL,
                                                                                                -- For 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
                                                                                    DL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional
                                                                         EXTENSION
   }, -- For 1.28Mcps TDD only
    . . .
CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD
CCTrCH-TPCItem-RL-SetupRgstTDD ::= SEOUENCE {
   cCTrCH-ID
                                          CCTrCH-ID,
                                          ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs} }
   iE-Extensions
CCTrCH-TPCItem-RL-SetupRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}
DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationList-RL-SetupRgstTDD
                                                     CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-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-SetupRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}
DL-DPCH-LCR-InformationIE-RL-SetupRgstTDD NBAP-PROTOCOL-IES ::= {
   { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD
                                                         CRITICALITY notify TYPE DL-DPCH-LCR-InformationItem-RL-SetupRgstTDD
                                                                                                                                PRESENCE
mandatory }
DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= 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 ::= {
RL-Information-RL-SetupRgstTDD ::= SEQUENCE
                                       RL-ID,
   C-TD
                                       C-ID,
   frameOffset
                                       FrameOffset,
   specialBurstScheduling
                                       SpecialBurstScheduling,
   initialDL-transmissionPower
                                       DL-Power,
   maximumDL-power
                                       DL-Power,
   minimumDL-power
                                       DL-Power,
                                       DL-TimeslotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
   dL-TimeSlotISCPInfo
   iE-Extensions
                                       ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs} }
RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   EXTENSION TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD
optional
         }, -- For 1.28Mcps TDD only
TimeslotISCP-LCR-InfoList-RL-SetupRgstTDD ::= SEOUENCE {
   dL-TimeslotISCP-LCR-Info DL-TimeslotISCPInfoLCR,
   iE-Extensions
                            ProtocolExtensionContainer { {TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs} }
                                                                                                             OPTIONAL.
   . . .
TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK SETUP RESPONSE FDD
__ ********************
RadioLinkSetupResponseFDD ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                              {{RadioLinkSetupResponseFDD-IEs}},
                         ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}}
   protocolExtensions
                                                                                                          OPTIONAL,
RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                         CRITICALITY ignore
                                                                                  TYPE
                                                                                                        CRNC-CommunicationContextID
              PRESENCE
                       mandatory }|
   { ID
          id-NodeB-CommunicationContextID
                                                                                                        NodeB-CommunicationContextID
                                                         CRITICALITY ignore
                                                                                  TYPE
          PRESENCE
                     mandatory }|
                                                                                                        CommunicationControlPortID
   { ID
          id-CommunicationControlPortID
                                                         CRITICALITY ignore
                                                                                  TYPE
          PRESENCE
                    mandatory }|
```

```
id-RL-InformationResponseList-RL-SetupRspFDD
                                                                 CRITICALITY ignore
                                                                                             TYPE
                                                                                                                     RL-InformationResponseList-RL-
    { ID
SetupRspFDD
                PRESENCE mandatory }
     ID
           id-TFCI2-BearerInformationResponse CRITICALITY ignore
                                                                             TYPE
                                                                                     TFCI2-BearerInformationResponse PRESENCE optional } |
     ID
           id-CriticalityDiagnostics
                                                                 CRITICALITY ignore
                                                                                             TYPE
                                                                                                                     CriticalityDiagnostics
            PRESENCE
                        optional
RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container ({ RL-InformationResponseItemIE-RL-
SetupRspFDD }}
RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
           id-RL-InformationResponseItem-RL-SetupRspFDD
                                                                                                                     RL-InformationResponseItem-RL-
                                                                     CRITICALITY
                                                                                     ignore
                                                                                                 TYPE
SetupRspFDD
                PRESENCE
                           mandatory}
RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID
                                                     RL-ID,
    rL-Set-ID
                                                    RL-Set-ID,
   received-total-wide-band-power
                                                                             Received-total-wide-band-power-Value,
    diversityIndication
                                    DiversityIndication-RL-SetupRspFDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    dSCH-InformationResponseList
                                                     DSCH-InformationResponseList-RL-SetupRspFDD
                                                                                                                     OPTIONAL,
    sSDT-SupportIndicator
                                                     SSDT-SupportIndicator,
                                                     ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                             OPTIONAL,
    . . .
RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining
                                                Combining-RL-SetupRspFDD,
    nonCombiningOrFirstRL
                                                NonCombiningOrFirstRL-RL-SetupRspFDD
Combining-RL-SetupRspFDD ::= SEQUENCE {
   rI.-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
                                                ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs} }
NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationResponseList-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspFDD }}
DSCH-InformationResponseListIEs-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
        *************
-- RADIO LINK SETUP RESPONSE TDD
__ ********************
RadioLinkSetupResponseTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{RadioLinkSetupResponseTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}}
                                                                                                            OPTIONAL,
RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                          CRITICALITY
                                                                         ignore
                                                                                        TYPE
                                                                                                          CRNC-CommunicationContextID
              PRESENCE
                         mandatory }|
    { ID
          id-NodeB-CommunicationContextID
                                                          CRITICALITY
                                                                         ignore
                                                                                        TYPE
                                                                                                          NodeB-CommunicationContextID
          PRESENCE
                     mandatory }
          id-CommunicationControlPortID
                                                                         ignore
                                                                                        TYPE
                                                                                                          CommunicationControlPortID
                                                          CRITICALITY
          PRESENCE
                     mandatory }|
    { ID
          id-RL-InformationResponse-RL-SetupRspTDD
                                                          CRITICALITY
                                                                         ignore
                                                                                        TYPE
                                                                                                          RL-InformationResponse-RL-
                  PRESENCE
                            optional
                                        } -- Mandatory for 3.84Mcps TDD only
SetupRspTDD
          id-CriticalityDiagnostics
                                                          CRITICALITY
                                                                                                          CriticalityDiagnostics
    { ID
                                                                         ignore
                                                                                        TYPE
          PRESENCE optional
RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
          id-RL-InformationResponse-LCR-RL-SetupRspTDD
                                                              CRITICALITY
                                                                             ignore
                                                                                                          EXTENSION RL-
InformationResponse-LCR-RL-SetupRspTDD
                                            PRESENCE
                                                                 }, -- Mandatory for 1.28Mcps TDD only
                                                      optional
   . . .
RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
   rL-ID
                                                RL-ID,
   uL-TimeSlot-ISCP-Info
                                    UL-TimeSlot-ISCP-Info,
   ul-PhysCH-SF-Variation
                                               UL-PhysCH-SF-Variation,
   dCH-InformationResponseList
                                               DCH-InformationResponseList-RL-SetupRspTDD
                                                                                                             OPTIONAL,
   dSCH-InformationResponseList
                                               DSCH-InformationResponseList-RL-SetupRspTDD
                                                                                                            OPTIONAL,
```

```
uSCH-InformationResponseList
                                            USCH-InformationResponseList-RL-SetupRspTDD
   iE-Extensions
                                            ProtocolExtensionContainer { { RL-InformationResponseList-RL-SetupRspTDD-ExtIEs} }
                                                                                                                     OPTIONAL.
   . . .
RL-InformationResponseList-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
                                                            DCH-InformationResponse PRESENCE
   { ID id-DCH-InformationResponse CRITICALITY
                                            ignore
                                                     TYPE
                                                                                                  mandatory }
DSCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspTDD }}
DSCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
USCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-SetupRspTDD }}
USCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
   { ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse
                                                                                 PRESENCE mandatory }
RL-InformationResponse-LCR-RL-SetupRspTDD ::= SEQUENCE {
   rL-ID
   uL-TimeSlot-ISCP-LCR-Info
                                            UL-TimeSlot-ISCP-LCR-Info,
   ul-PhysCH-SF-Variation
                                            UL-PhysCH-SF-Variation,
   dCH-InformationResponseList
                                            DCH-InformationResponseList-RL-SetupRspTDD
                                                                                                    OPTIONAL,
   dSCH-InformationResponseList
                                            DSCH-InformationResponseList-RL-SetupRspTDD
                                                                                                    OPTIONAL,
   uSCH-InformationResponseList
                                            USCH-InformationResponseList-RL-SetupRspTDD
                                                                                                    OPTIONAL,
   iE-Extensions
                                            OPTIONAL,
RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK SETUP FAILURE FDD
    ******************
RadioLinkSetupFailureFDD ::= SEOUENCE {
   protocolIEs
                       ProtocolIE-Container
                                           {{RadioLinkSetupFailureFDD-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
                                                                                                  OPTIONAL,
```

```
RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                                         CRITICALITY
                                                                                        ignore
                                                                                                                    TYPE CRNC-
CommunicationContextID
                                                      PRESENCE
                                                                 mandatory }
    { ID
           id-NodeB-CommunicationContextID
                                                                         CRITICALITY
                                                                                                                    TYPE NodeB-
                                                                                        ignore
CommunicationContextID
                                                  PRESENCE
                                                             conditional }
   -- This IE shall be present if at least one of the radio links has been successfully set up
          id-CommunicationControlPortID
                                                                         CRITICALITY
                                                                                        ignore
                                                                                                                    TYPE
    CommunicationControlPortID
                                                             PRESENCE
                                                                         optional
                                                                         CRITICALITY
    { ID
          id-CauseLevel-RL-SetupFailureFDD
                                                                                        ignore
                                                                                                                    TYPE CauseLevel-RL-
SetupFailureFDD
                   PRESENCE mandatory
                                                                                                                    TYPE
    { ID
          id-CriticalityDiagnostics
                                                                         CRITICALITY
                                                                                        ignore
   CriticalityDiagnostics
                                                             PRESENCE
                                                                         optional
    . . .
RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-SetupFailureFDD ::= CHOICE {
   generalCause
                      GeneralCauseList-RL-SetupFailureFDD,
   rLSpecificCause
                      RLSpecificCauseList-RL-SetupFailureFDD.
GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE
                                              ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
   unsuccessful-RL-InformationRespList-RL-SetupFailureFDD
                                                             Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD
                                                             Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
                                              iE-Extensions
                                                                                                                             OPTIONAL,
    . . .
RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
```

```
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD
                                                                             CRITICALITY
                                                                                                                        TYPE Unsuccessful-RL-
                                                                                             ignore
InformationRespItem-RL-SetupFailureFDD
                                            PRESENCE
                                                        mandat.orv}
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
                                                RL-ID,
    cause
                                                Cause,
    iE-Extensions
                                                ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    . . .
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEOUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
           id-Successful-RL-InformationRespItem-RL-SetupFailureFDD
                                                                             CRITICALITY
                                                                                             ignore
                                                                                                                        TYPE Successful-RL-
InformationRespItem-RL-SetupFailureFDD
                                            PRESENCE
                                                        mandatory }
Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
   rL-ID
                                                RL-ID,
    rL-Set-ID
                                                RL-Set-ID,
    received-total-wide-band-power
                                                                         Received-total-wide-band-power-Value,
    diversityIndication
                                                DiversityIndication-RL-SetupFailureFDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    dSCH-InformationResponseList
                                                DSCH-InformationRespList-RL-SetupFailureFDD
                                                                                                 OPTIONAL,
    tFCI2-BearerInformationResponse
                                                TFCI2-BearerInformationResponse
                                                                                     OPTIONAL,
    sSDT-SupportIndicator
                                                SSDT-SupportIndicator,
    iE-Extensions
                                                ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
    combining
                                                Combining-RL-SetupFailureFDD,
    nonCombiningOrFirstRL
                                            NonCombiningOrFirstRL-RL-SetupFailureFDD
Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
                                                ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} } 
    iE-Extensions
                                                                                                                              OPTIONAL,
```

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```
CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEOUENCE {
   dCH-InformationResponse
                                          DCH-InformationResponse,
   iE-Extensions
                                              ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} }
   OPTIONAL,
   . . .
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationRespList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationRespListIEs-RL-SetupFailureFDD }}
DSCH-InformationRespListIEs-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
       -- RADIO LINK SETUP FAILURE TDD
__ ********************************
RadioLinkSetupFailureTDD ::= SEQUENCE {
                                             {{RadioLinkSetupFailureTDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                                CRITICALITY ignore
                                                                                     TYPE
                                                                                                       CRNC-CommunicationContextID
                     PRESENCE
                               mandatory }|
   { ID
          id-CauseLevel-RL-SetupFailureTDD
                                                                    CRITICALITY
                                                                                                            TYPE CauseLevel-RL-
                                                                                  ignore
SetupFailureTDD
                 PRESENCE mandatory
          id-CriticalityDiagnostics
                                                                CRITICALITY ignore
                                                                                     TYPE
                                                                                                       CriticalityDiagnostics
                 PRESENCE
                            optional
RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-SetupFailureTDD ::= CHOICE {
   generalCause
                     GeneralCauseList-RL-SetupFailureTDD,
   rLSpecificCause
                     RLSpecificCauseList-RL-SetupFailureTDD,
```

```
GeneralCauseList-RL-SetupFailureTDD ::= SEOUENCE {
    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 ::= {
Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD}}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
          id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD
                                                                      CRITICALITY ignore
                                                                                                                 Unsuccessful-RL-InformationResp-
                                                                                              TYPE
RL-SetupFailureTDD
                       PRESENCE
                                   mandatory }
Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
   rL-ID
                                              RL-ID,
   cause
                                               Cause,
                                               ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ADDITION REQUEST FDD
   *****************
RadioLinkAdditionRequestFDD ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                   {{RadioLinkAdditionRequestFDD-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}
                                                                                                                      OPTIONAL,
```

```
RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-NodeB-CommunicationContextID
                                                        CRITICALITY reject
                                                                                          NodeB-CommunicationContextID
                                                                                                                                PRESENCE
   mandatory }
     ID id-Compressed-Mode-Deactivation-Flag
                                                CRITICALITY reject
                                                                               TYPE Compressed-Mode-Deactivation-Flag PRESENCE optional }
          id-RL-InformationList-RL-AdditionRgstFDD
                                                                                                            RL-InformationList-RL-
                                                           CRITICALITY notify
AdditionRqstFDD
                      PRESENCE
                                 mandatory },
   . . .
RadioLinkAdditionRequestFDD-Extensions 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 ::= {
          id-RL-InformationItem-RL-AdditionRqstFDD
                                                            CRITICALITY
                                                                           notify
                                                                                          TYPE
                                                                                                            RL-InformationItem-RL-
AdditionRqstFDD
                      PRESENCE
                                 mandatory }
RL-InformationItem-RL-AdditionRgstFDD ::= SEQUENCE {
   rL-ID
                                             RL-ID,
   c-ID
                                             C-ID,
   frameOffset
                                             FrameOffset,
   chipOffset
                                             ChipOffset,
   diversityControlField
                                             DiversityControlField,
                                         FDD-DL-CodeInformation,
   dl-CodeInformation
   initialDL-TransmissionPower
                                            DL-Power
                                                                           OPTIONAL,
                                            DL-Power
   maximumDL-Power
                                                                           OPTIONAL,
   minimumDL-Power
                                                                           OPTIONAL,
                                            DL-Power
   sSDT-CellIdentity
                                             SSDT-Cell-Identity
                                                                           OPTIONAL,
   transmitDiversityIndicator
                                            TransmitDiversityIndicator
                                                                           OPTIONAL,
   iE-Extensions
                                             OPTIONAL,
RL-InformationItem-RL-AdditionRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ADDITION REQUEST TDD
  *****************
RadioLinkAdditionRequestTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                {{RadioLinkAdditionRequestTDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}
   protocolExtensions
                                                                                                               OPTIONAL,
```

```
RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID
          id-NodeB-CommunicationContextID
                                                                   CRITICALITY
                                                                                   reject
                                                                                                                   TYPE NodeB-
CommunicationContextID
                                           PRESENCE
                                                       mandatory
           id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                                                   CRITICALITY
                                                                                   reject
                                                                                                                   TYPE UL-CCTrCH-InformationList-
                           PRESENCE
RL-AdditionRgstTDD
                                       optional
    { ID
           id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                                                   CRITICALITY
                                                                                   reject
                                                                                                                   TYPE DL-CCTrCH-InformationList-
RL-AdditionRgstTDD
                     PRESENCE
                                       optional
          id-RL-Information-RL-AdditionRqstTDD
                                                                   CRITICALITY
                                                                                   reject
                                                                                                                   TYPE RL-Information-RL-
AdditionRgstTDD
                               PRESENCE
                                           mandatory },
RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationList-RL-AdditionRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRgstTDD
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                               CCTrCH-ID,
    uL-DPCH-Information
                                               UL-DPCH-InformationList-RL-AdditionRqstTDD
                                               ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-UL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD
                                                                       CRITICALITY
                                                                                       notify
                                                                                                                     EXTENSION UL-DPCH-
InformationItem-LCR-RL-AdditionRgstTDD
                                               PRESENCE
                                                           optional \ -- For 1.28cps TDD only
UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}
UL-DPCH-InformationItemIE-RL-AdditionRgstTDD NBAP-PROTOCOL-IES ::= {
          id-UL-DPCH-InformationItem-RL-AdditionRgstTDD
                                                                   CRITICALITY
                                                                                   notify
                                                                                                                   TYPE UL-DPCH-InformationItem-RL-
AdditionRqstTDD
                       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,
                                               ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                                       OPTIONAL,
UL-DPCH-InformationItem-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-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                                CCTrCH-ID.
    dL-DPCH-Information
                                                DL-DPCH-InformationList-RL-AdditionRgstTDD
                                                                                                OPTIONAL.
    iE-Extensions
                                                ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} }
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    { ID
           id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD
                                                                        CRITICALITY
                                                                                        notify
                                                                                                                       EXTENSION DL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD
                                                PRESENCE
                                                            optional \ -- For 1.28Mcps TDD only
DL-DPCH-InformationList-RL-AdditionRgstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRgstTDD }}
DL-DPCH-InformationItemIE-RL-AdditionRgstTDD NBAP-PROTOCOL-IES ::= {
          id-DL-DPCH-InformationItem-RL-AdditionRgstTDD
                                                                    CRITICALITY
                                                                                    notify
                                                                                                                    TYPE DL-DPCH-InformationItem-RL-
                                   mandatory } -- For 3.84Mcps TDD only
AdditionRgstTDD
                        PRESENCE
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-AdditionRgstTDD-ExtIEs} }
                                                                                                                                            OPTIONAL.
DL-DPCH-InformationItem-RL-AdditionRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-AdditionRgstTDD ::= SEOUENCE {
    rL-ID
                                                RL-ID,
    c-ID
                                                C-ID.
    frameOffset
                                                FrameOffset,
    diversityControlField
                                                DiversityControlField,
    initial-DL-Transmission-Power
                                                DL-Power
                                                                    OPTIONAL,
    maximumDL-Power
                                                DL-Power
                                                                    OPTIONAL,
    minimumDL-Power
                                                DL-Power
                                                                    OPTIONAL,
    dL-TimeSlotISCPInfo
                                                DL-TimeslotISCPInfo OPTIONAL,
                                                                               -- For 3.84Mcps TDD only
                                                ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
           id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD
                                                                            CRITICALITY
                                                                                            notify
                                                                                                                          EXTENSION TIMESLOTISCP-
InformationList-LCR-RL-AdditionRgstTDD
                                                PRESENCE
                                                            optional \ -- For 1.28Mcps TDD only
```

```
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-TimeslotLCR-Information
                                         UL-TimeslotLCR-Information,
                                         ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                               OPTIONAL,
UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
                                         TDD-DPCHOffset,
   tdd-DPCHOffset
   dL-TimeslotLCR-Information
                                         DL-TimeslotLCR-Information,
   iE-Extensions
                                         ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs} }
                                                                                                                                OPTIONAL,
   . . .
DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
TIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD ::= SEQUENCE
   dL-TimeslotISCP-LCR-Info
                             DL-TimeslotISCPInfoLCR,
                             iE-Extensions
                                                                                                                 OPTIONAL,
TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ADDITION RESPONSE FDD
__ *********************
RadioLinkAdditionResponseFDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                {{RadioLinkAdditionResponseFDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
RadioLinkAdditionResponseFDD-IES NBAP-PROTOCOL-IES ::= {
   { ID
          id-CRNC-CommunicationContextID
                                                                CRITICALITY
                                                                               ignore
                                                                                                               TYPE CRNC-
CommunicationContextID
                                         PRESENCE
                                                    mandatory
          id-RL-InformationResponseList-RL-AdditionRspFDD
                                                                CRITICALITY
                                                                               ignore
                                                                                                               TYPE RL-
InformationResponseList-RL-AdditionRspFDD PRESENCE
                                                    mandatory
```

```
id-CriticalityDiagnostics
                                                                 CRITICALITY
                                                                                                                 TYPE CriticalityDiagnostics
                                                                                 ignore
                       PRESENCE
                                  optional
RadioLinkAdditionResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}
RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
          id-RL-InformationResponseItem-RL-AdditionRspFDD
                                                                 CRITICALITY
                                                                                ignore
                                                                                                               TYPE RL-InformationResponseItem-
RL-AdditionRspFDD
                       PRESENCE
                                  mandatory}
RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE
   rL-ID
                                                  RL-ID,
   rL-Set-ID
                                                  RL-Set-ID,
   received-total-wide-band-power
                                                                         Received-total-wide-band-power-Value,
                                                  DiversityIndication-RL-AdditionRspFDD,
   diversityIndication
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    sSDT-SupportIndicator
                                                  SSDT-SupportIndicator,
   iE-Extensions
                                                  OPTIONAL,
RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
   combining
                                                  Combining-RL-AdditionRspFDD,
   non-combining
                                                  Non-Combining-RL-AdditionRspFDD
Combining-RL-AdditionRspFDD ::= SEQUENCE {
   rL-ID
                                                  RL-ID,
                                                  ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } }
   iE-Extensions
CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
   dCH-InformationResponse
                                              DCH-InformationResponse,
   iE-Extensions
                                                  ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs} } }
                                                                                                                                OPTIONAL,
```

```
Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
-- RADIO LINK ADDITION RESPONSE TDD
  *****************
RadioLinkAdditionResponseTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{RadioLinkAdditionResponseTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}
                                                                                                              OPTIONAL,
RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                            CRITICALITY ignore
                                                                                      TYPE
                                                                                                            CRNC-CommunicationContextID
               PRESENCE
                         mandatory }
           id-RL-InformationResponse-RL-AdditionRspTDD
                                                                                                            RL-InformationResponse-RL-
    { ID
                                                            CRITICALITY ignore
                                                                                      TYPE
AdditionRspTDD
                  PRESENCE
                            mandatory }|
          id-CriticalityDiagnostics
    { ID
                                                           CRITICALITY ignore
                                                                                      TYPE
                                                                                                            CriticalityDiagnostics
           PRESENCE
                      optional
    . . .
RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
   uL-TimeSlot-ISCP-Info
                                            UL-TimeSlot-ISCP-Info,
   ul-PhysCH-SF-Variation
                                            UL-PhysCH-SF-Variation,
   dCH-Information
                                             DCH-Information-RL-AdditionRspTDD
                                                                                          OPTIONAL,
   dSCH-InformationResponseList
                                             DSCH-InformationResponseList-RL-AdditionRspTDD
                                                                                                            OPTIONAL,
   uSCH-InformationResponseList
                                             USCH-InformationResponseList-RL-AdditionRspTDD
                                                                                                            OPTIONAL,
   iE-Extensions
                                             OPTIONAL,
RL-InformationResponse-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
   diversityIndication
                                     DiversityIndication-RL-AdditionRspTDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
   iE-Extensions
                                 ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
```

```
DCH-Information-RL-AdditionRspTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
   combining
                                          Combining-RL-AdditionRspTDD,
   non-Combining
                                          Non-Combining-RL-AdditionRspTDD
Combining-RL-AdditionRspTDD ::= SEQUENCE {
                                          RL-ID,
   iE-Extensions
                                          ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } }
                                                                                                               OPTIONAL,
CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionRspTDD ::= SEQUENCE
   dCH-InformationResponse
                                       DCH-InformationResponse,
   iE-Extensions
                                          ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs} } }
                                                                                                                    OPTIONAL,
Non-CombiningItem-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}
DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}
USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
    ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse
                                                                                     PRESENCE mandatory }
        -- RADIO LINK ADDITION FAILURE FDD
  ******************
RadioLinkAdditionFailureFDD ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{RadioLinkAdditionFailureFDD-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}
                                                                                                         OPTIONAL,
```

```
RadioLinkAdditionFailureFDD-IES NBAP-PROTOCOL-IES ::=
           id-CRNC-CommunicationContextID
                                                    CRITICALITY
                                                                    ignore
                                                                                 TYPE
                                                                                         CRNC-CommunicationContextID
                                                                                                                              PRESENCE mandatory
            id-CauseLevel-RL-AdditionFailureFDD
                                                    CRITICALITY
                                                                     ignore
                                                                                 TYPE
                                                                                         CauseLevel-RL-AdditionFailureFDD
                                                                                                                              PRESENCE mandatory
           id-CriticalityDiagnostics
     ID
                                                    CRITICALITY
                                                                    ignore
                                                                                 TYPE
                                                                                         CriticalityDiagnostics
                                                                                                                                 PRESENCE optional
    . . .
RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
    generalCause
                        GeneralCauseList-RL-AdditionFailureFDD,
                        RLSpecificCauseList-RL-AdditionFailureFDD,
    rLSpecificCause
GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
                                                ProtocolExtensionContainer { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                      OPTIONAL,
    . . .
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    Successful-RL-InformationRespList-RL-AdditionFailureFDD OPTIONAL,
                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
           id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD
                                                                                 CRITICALITY
                                                                                                 ignore
                                                                                                                       TYPE Unsuccessful-RL-
InformationRespItem-RL-AdditionFailureFDD PRESENCE
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID
                                                RL-ID,
    cause
                                                Cause,
```

```
iE-Extensions
                                              ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
       OPTIONAL,
    . . .
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
          id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD
                                                                         CRITICALITY
                                                                                         ignore
                                                                                                                  TYPE Successful-RL-
InformationRespItem-RL-AdditionFailureFDD
                                              PRESENCE
                                                          mandatory}
Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
   rL-ID
                                              RL-ID,
   rL-Set-ID
                                              RL-Set-ID,
   received-total-wide-band-power
                                              Received-total-wide-band-power-Value,
                                              DiversityIndication-RL-AdditionFailureFDD,
   diversityIndication
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    sSDT-SupportIndicator
                                              SSDT-SupportIndicator,
   iE-Extensions
                                              ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
   OPTIONAL,
Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
   combining
                                  Combining-RL-AdditionFailureFDD,
   non-Combining
                                  Non-Combining-RL-AdditionFailureFDD
Combining-RL-AdditionFailureFDD ::= SEQUENCE {
   rL-ID
   iE-Extensions
                                              OPTIONAL.
CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE
   dCH-InformationResponse
                                              DCH-InformationResponse,
   iE-Extensions
                                                  ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs} }
                                                                                                                                      OPTIONAL,
```

```
Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ADDITION FAILURE TDD
__ *********************
RadioLinkAdditionFailureTDD ::= SEOUENCE {
    protocolIEs
                          ProtocolIE-Container
                                                   {{RadioLinkAdditionFailureTDD-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}
                                                                                                                   OPTIONAL,
RadioLinkAdditionFailureTDD-IES NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                      CRITICALITY
                                                                      ignore
                                                                                  TYPE
                                                                                         CRNC-CommunicationContextID
    PRESENCE
               mandatory }|
           id-CauseLevel-RL-AdditionFailureTDD
    { ID
                                                                                         CauseLevel-RL-AdditionFailureTDD
                                                      CRITICALITY
                                                                      ignore
                                                                                  TYPE
    PRESENCE
               mandatory }
    { ID
          id-CriticalityDiagnostics
                                                      CRITICALITY
                                                                      ignore
                                                                                 TYPE
                                                                                         CriticalityDiagnostics
               optional },
    PRESENCE
    . . .
RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause
                       GeneralCauseList-RL-AdditionFailureTDD,
   rLSpecificCause
                       RLSpecificCauseList-RL-AdditionFailureTDD,
GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
                               ProtocolExtensionContainer { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }
    iE-Extensions
                                                                                                                   OPTIONAL,
GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD
                                                              Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
                                                              ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
```

```
RLSpecificCauseItem-RL-AdditionFailureTDD-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
AdditionFailureTDD } }
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
    PRESENCE mandatory }
Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD ::= SEQUENCE {
   rL-ID
                                          RL-ID,
    cause
                                          ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK RECONFIGURATION PREPARE FDD
RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
                          ProtocolIE-Container
                                                  {{RadioLinkReconfigurationPrepareFDD-IEs}},
   protocolIEs
                          ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
RadioLinkReconfigurationPrepareFDD-IEs NBAP-PROTOCOL-IES ::= {
          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-DL-DPCH-Information-RL-ReconfPrepFDD
                                                         CRITICALITY
                                                                                        TYPE
                                                                                                               DL-DPCH-Information-RL-
    { ID
                                                                         reject
ReconfPrepFDD
                   PRESENCE
                              optional
           id-FDD-DCHs-to-Modify
     ID
                                              CRITICALITY
                                                             reject
                                                                             TYPE
                                                                                    FDD-DCHs-to-Modify
                                                                                                                       PRESENCE optional }
           id-DCHs-to-Add-FDD
                                              CRITICALITY
                                                             reject
                                                                                    DCH-FDD-Information
                                                                                                                       PRESENCE optional }
           id-DCH-DeleteList-RL-ReconfPrepFDD
                                                         CRITICALITY
                                                                         reject
                                                                                        TYPE
                                                                                                               DCH-DeleteList-RL-ReconfPrepFDD
     ID
           PRESENCE
                     optional } |
           id-DSCH-ModifyList-RL-ReconfPrepFDD
                                                         CRITICALITY
                                                                         reject
                                                                                        TYPE
                                                                                                               DSCH-ModifyList-RL-ReconfPrepFDD
           PRESENCE
                     optional } |
    { ID
           id-DSCHs-to-Add-FDD
                                          CRITICALITY
                                                         reject
                                                                         TYPE
                                                                                DSCH-FDD-Information
                                                                                                                          PRESENCE optional }
```

OPTIONAL,

OPTIONAL,

OPTIONAL,

OPTIONAL,

OPTIONAL, ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }

OPTIONAL,

TFCI-Presence

MultiplexingPosition

LimitedPowerIncrease

PDSCH-CodeMapping

-- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16

RL-ID

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

tFCI-Presence

pDSCH-RL-ID

. . .

iE-Extensions

multiplexingPosition

limitedPowerIncrease

pDSCH-CodeMapping

```
DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD
DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID
                                                    DCH-ID,
    iE-Extensions
                                                    ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} }
DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-ModifyItemIE-RL-ReconfPrepFDD }}
DSCH-ModifyItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
           id-DSCH-ModifyItem-RL-ReconfPrepFDD
                                                    CRITICALITY reject
                                                                            TYPE
                                                                                    DSCH-ModifyItem-RL-ReconfPrepFDD PRESENCE mandatory
DSCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dscH-ID
                                                    DSCH-ID.
    dl-TransportFormatSet
                                                    TransportFormatSet
                                                                                OPTIONAL,
    allocationRetentionPriority
                                                    AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                    FrameHandlingPriority
                                                                                OPTIONAL,
    toAWS
                                                    ToAWS
                                                                                OPTIONAL,
    toAWE
                                                    TOAWE
                                                                                OPTIONAL,
    transportBearerRequestIndicator
                                                    TransportBearerRequestIndicator,
                                                    ProtocolExtensionContainer { { DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-DeleteItemIE-RL-ReconfPrepFDD }}
DSCH-DeleteItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID
           id-DSCH-DeleteItem-RL-ReconfPrepFDD
                                                    CRITICALITY reject
                                                                            TYPE
                                                                                    DSCH-DeleteItem-RL-ReconfPrepFDD PRESENCE mandatory}
DSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID
                                                    DSCH-ID,
    iE-Extensions
                                                    ProtocolExtensionContainer { { DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } }
                                                                                                                                   OPTIONAL,
DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

```
TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD ::= CHOICE {
   addOrModify
                          AddOrModify-TFCI2-RL-ReconfPrepFDD,
   delete
                          NULL
AddOrModify-TFCI2-RL-ReconfPrepFDD ::= SEQUENCE {
   toAWS
                                      ToAWS,
   toAWE
   iE-Extensions
                                      ProtocolExtensionContainer { { AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                 OPTIONAL,
AddOrModify-TFCI2-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-RL-InformationItem-RL-ReconfPrepFDD
                                                         CRITICALITY
                                                                                        TYPE
                                                                                                               RL-InformationItem-RL-
                                                                         reject
ReconfPrepFDD
                   PRESENCE
                              mandatory}
RL-InformationItem-RL-ReconfPrepFDD ::= SEOUENCE {
                                                  RL-ID.
   dl-CodeInformation
                                              FDD-DL-CodeInformation
                                                                         OPTIONAL.
   maxDL-Power
                                                  DL-Power
                                                                                            OPTIONAL,
   minDL-Power
                                                  DL-Power
                                                                                            OPTIONAL,
    sSDT-Indication
                                                  SSDT-Indication
                                                                                            OPTIONAL,
    sSDT-Cell-Identity
                                                  SSDT-Cell-Identity
                                                                                            OPTIONAL,
    -- The IE shall be present if the SSDT Indication IE is set to "SSDT Active in the UE"
   transmitDiversityIndicator
                                                  TransmitDiversityIndicator
                                                                                            OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to "none"
                                                  ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfPrepFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
    . . .
RL-InformationItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-Cell-Identity
                                                                                    PRESENCE conditional },
   -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
    *****************
-- RADIO LINK RECONFIGURATION PREPARE TDD
  RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
                                                  {{RadioLinkReconfigurationPrepareTDD-IEs}},
   protocolIEs
                          ProtocolIE-Container
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}
                                                                                                                 OPTIONAL,
```

```
RadioLinkReconfigurationPrepareTDD-IES NBAP-PROTOCOL-IES ::= {
           id-NodeB-CommunicationContextID
                                                                     CRITICALITY
                                                                                     reject
                                                                                                 TYPE
                                                                                                                     NodeB-CommunicationContextID
                PRESENCE
                           mandatory }|
           id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                                         CRITICALITY
                                                                                                                     TYPE UL-CCTrCH-
    { ID
                                                                                         reject
                                                        optional
InformationAddList-RL-ReconfPrepTDD
                                            PRESENCE
           id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                                         CRITICALITY
                                                                                         reject
                                                                                                                     TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfPrepTDD
                                                PRESENCE
                                                            optional
           id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                                         CRITICALITY
                                                                                         reject
                                                                                                                     TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfPrepTDD
                                                PRESENCE
                                                            optional
                                                                             } |
           id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                                         CRITICALITY
                                                                                         reject
                                                                                                                     TYPE DL-CCTrCH-
InformationAddList-RL-ReconfPrepTDD
                                            PRESENCE
                                                        optional
           id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                                         CRITICALITY
                                                                                         reject
                                                                                                                     TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfPrepTDD
                                                PRESENCE
                                                                             } |
           id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                                         CRITICALITY
                                                                                         reject
                                                                                                                     TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfPrepTDD
                                                PRESENCE
                                                            optional
                                                                                             TDD-DCHs-to-Modify
     ID
           id-TDD-DCHs-to-Modify
                                                         CRITICALITY
                                                                         reject
                                                                                     TYPE
                                                                                                                                    PRESENCE optional
     ID
           id-DCHs-to-Add-TDD
                                                         CRITICALITY
                                                                         reject
                                                                                     TYPE
                                                                                             DCH-TDD-Information
                                                                                                                                    PRESENCE optional
            id-DCH-DeleteList-RL-ReconfPrepTDD
                                                                     CRITICALITY
                                                                                                                     DCH-DeleteList-RL-ReconfPrepTDD
     ID
                                                                                     reject
                                                                                                 TYPE
                    PRESENCE
                                optional
    { ID
           id-DSCH-Information-ModifyList-RL-ReconfPrepTDD
                                                                     CRITICALITY
                                                                                     reject
                                                                                                 TYPE
                                                                                                                     DSCH-Information-ModifyList-RL-
                                optional
                    PRESENCE
ReconfPrepTDD
            id-DSCHs-to-Add-TDD
                                        CRITICALITY
                                                                     TYPE
                                                                             DSCH-TDD-Information
                                                                                                                           PRESENCE
                                                                                                                                       optional
            id-DSCH-Information-DeleteList-RL-ReconfPrepTDD
                                                                                                                     DSCH-Information-DeleteList-RL-
     ID
                                                                     CRITICALITY
                                                                                     reject
                                                                                                 TYPE
ReconfPrepTDD
                    PRESENCE
                                optional
                                                                                                                     USCH-Information-ModifyList-RL-
    { ID
            id-USCH-Information-ModifyList-RL-ReconfPrepTDD
                                                                     CRITICALITY
                                                                                     reject
                                                                                                 TYPE
ReconfPrepTDD
                    PRESENCE
                                optional
    { ID
           id-USCH-Information-Add
                                            CRITICALITY
                                                             reject
                                                                         TYPE
                                                                                 USCH-Information
                                                                                                                           PRESENCE
                                                                                                                                      optional
            id-USCH-Information-DeleteList-RL-ReconfPrepTDD
                                                                                                                     USCH-Information-DeleteList-RL-
     ID
                                                                     CRITICALITY
                                                                                     reject
                                                                                                 TYPE
ReconfPrepTDD
                    PRESENCE
                                optional
    { ID
           id-RL-Information-RL-ReconfPrepTDD
                                                                     CRITICALITY
                                                                                     reject
                                                                                                 TYPE
                                                                                                                     RL-Information-RL-ReconfPrepTDD
                    PRESENCE
                                optional
RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEOUENCE {
    cCTrCH-ID
                                                CCTrCH-ID,
    tFCS
                                                TFCS,
    tFCI-Coding
                                                TFCI-Coding,
    punctureLimit
                                                PunctureLimit,
    ul-DPCH-InformationList
                                                UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
                                                ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                             OPTIONAL,
    . . .
```

```
UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                 EXTENSION UL-DPCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional }
                        -- For 3.84Mcps TDD only
    { ID id-UL-SIRTarget
                              CRITICALITY reject
                                                      EXTENSION
                                                                     UL-SIR
                                                                                 PRESENCE optional
                                                                                                                },
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD
                                                                                                                                    PRESENCE
mandatory }
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE
                                          RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
    uL-Timeslot-Information
                                          UL-Timeslot-Information,
                                          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 ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                     TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory \ -- For 1.28Mcps TDD only
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
                                          RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                          RepetitionLength,
    tdd-DPCHOffset
                                          TDD-DPCHOffset,
    uL-Timeslot-InformationLCR
                                          UL-TimeslotLCR-Information,
    iE-Extensions
                                          ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                                   OPTIONAL.
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= 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,
   ul-DPCH-InformationModifyList
                                             UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                            OPTIONAL.
   ul-DPCH-InformationDeleteList
                                             UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                            OPTIONAL,
                                             iE-Extensions
   OPTIONAL,
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationModify-AddList
                                                 CRITICALITY reject
                                                                       EXTENSION
                                                                                   UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
   PRESENCE optional }
                        -- For 1.28Mcps TDD only
   { ID id-UL-SIRTarget
                             CRITICALITY reject
                                                                               PRESENCE optional
                                                    EXTENSION
                                                                   UL-SIR
   -- This IE shall be applicable for 1.28Mcps TDD only.
UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
   PRESENCE mandatory }
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
                                         TDD-DPCHOffset,
   tdd-DPCHOffset
   uL-Timeslot-Information
                                     UL-Timeslot-Information,
                                             ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
   . . .
UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD
}}
UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
   { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                          TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD
                  PRESENCE mandatory }
UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   uL-Timeslot-InformationLCR
                                         UL-TimeslotLCR-Information,
```

```
iE-Extensions
                                              ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL.
    . . .
UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModifyListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                            TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD
                   PRESENCE mandatory }
UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod
                                                             OPTIONAL,
   repetitionLength
                                          RepetitionLength
                                                             OPTIONAL,
    tdd-DPCHOffset
                                          TDD-DPCHOffset
                                                             OPTIONAL,
   uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                        UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                                     OPTIONAL.
                                              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-
ReconfPrepTDD
                   PRESENCE optional }, -- For 1.28Mcps TDD only
UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- For 3.84Mcps TDD only
UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot
                                          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-ReconfPrepTDD
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 -- For 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                               MidambleShiftLCR
                                                      OPTIONAL,
    t.FCI-Presence
                                          TFCI-Presence
                                                              OPTIONAL.
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR
                                                                          UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR
                                          ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLCR ::= SEQUENCE (SIZE (1...maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD
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 ::= {
UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD
                   PRESENCE mandatory }
UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1...maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
                                              DPCH-ID,
   dPCH-ID
```

```
ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL.
    . . .
UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
   iE-Extensions
                                              ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                                  CCTrCH-ID,
   tFCS
                                                  TFCS,
    tFCI-Coding
                                                  TFCI-Coding
   punctureLimit
                                                  PunctureLimit,
   cCTrCH-TPCList
                                                  CCTrCH-TPCAddList-RL-ReconfPrepTDD
                                                                                                               OPTIONAL,
   dl-DPCH-InformationList
                                                  DL-DPCH-InformationAddList-RL-ReconfPrepTDD
                                                                                                               OPTIONAL,
                                                  ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                     EXTENSION
                                                                                                                   DL-DPCH-LCR-
InformationAddList-RL-ReconfPrepTDD
                                      PRESENCE optional \ -- For 1.28Mcps TDD only
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
                                                                                                                  -- For 3.84Mcps TDD only
CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEOUENCE {
   cCTrCH-ID
                                          CCTrCH-ID,
   iE-Extensions
                                          OPTIONAL,
CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD }}
DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
   TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD
                                                                                                                               PRESENCE
mandatory }
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   dL-Timeslot-Information
                                         DL-Timeslot-Information,
   iE-Extensions
                                         OPTIONAL,
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}
DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                  TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
   PRESENCE mandatory \ -- For 1.28Mcps TDD only
DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                         RepetitionPeriod,
   repetitionLength
                                         RepetitionLength,
   tdd-DPCHOffset
                                         TDD-DPCHOffset,
   dL-Timeslot-InformationLCR
                                         DL-TimeslotLCR-Information,
                                         ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
                                                                                                                               OPTIONAL,
   . . .
DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                                CCTrCH-ID,
   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,
   dl-DPCH-InformationModifyList
                                                DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                            OPTIONAL,
   dl-DPCH-InformationDeleteList
                                                DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD
                                                                                                            OPTIONAL,
```

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ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
   OPTIONAL.
    . . .
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject
                                                                                         EXTENSION
                                                                                                               DL-DPCH-LCR-InformationModify-
AddList-RL-ReconfPrepTDD
                              PRESENCE optional }
CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
                                       ::= SEOUENCE {
   cCTrCH-ID
                                          CCTrCH-ID.
   iE-Extensions
                                          ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                           OPTIONAL,
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }} --
For 3.84Mcps TDD only
DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
    PRESENCE mandatory \ -- For 1.28Mcps TDD only
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
   tdd-DPCHOffset
                                          TDD-DPCHOffset,
   dL-Timeslot-Information
                                          DL-Timeslot-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
                                                                                                                                      OPTIONAL,
    . . .
DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD
} }
DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD CRITICALITY reject
                                                                                            TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD
                   PRESENCE mandatory }
DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
```

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repetitionPeriod
                                          RepetitionPeriod,
   repetitionLength
                                          RepetitionLength,
    t.dd-DPCHOffset
                                          TDD-DPCHOffset.
   dL-Timeslot-InformationLCR
                                          DL-TimeslotLCR-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL,
DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-ModifyListIEs-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-
                   PRESENCE mandatory }
ReconfPrepTDD
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
                                                                                                                   EXTENSION
                                                                                                                                  DL-Timeslot-
                                                                         CRITICALITY reject
LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                      PRESENCE optional }
DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                           ::= 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 ::= {
DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD
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DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                         ::= SEQUENCE
    dPCH-ID
                                            DPCH-ID.
    tdd-ChannelisationCode
                                            TDD-ChannelisationCode
                                                                         OPTIONAL.
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-
RL-ReconfPrepTDD
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                                  ::= SEOUENCE
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                MidambleShiftLCR
                                                            OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                                    OPTIONAL,
    dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                             DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                                                                                            OPTIONAL.
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD
DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD
                                                             ::= SEOUENCE {
    dPCH-ID
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR
                                                                            OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { | DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-Code-LCR-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 ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD
```

```
DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dPCH-ID
                                           DPCH-ID.
   iE-Extensions
                                           ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }
   OPTIONAL.
   . . .
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                                               CCTrCH-ID,
                                               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
                                           ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } }
   iE-Extensions
                                                                                                                 OPTIONAL,
   . . .
DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD
DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE
   dSCH-ID
                                           DSCH-ID,
   cCTrCH-ID
                                           CCTrCH-ID
                                                                  OPTIONAL,
   transportFormatSet
                                           TransportFormatSet
                                                                  OPTIONAL,
   allocationRetentionPriority
                                           AllocationRetentionPriority OPTIONAL,
   frameHandlingPriority
                                           FrameHandlingPriority
                                                                 OPTIONAL,
   toAWS
                                           ToAWS
                                                                  OPTIONAL,
                                           ToAWE
                                                                  OPTIONAL,
   transportBearerRequestIndicator
                                           TransportBearerRequestIndicator,
                                           iE-Extensions
                                                                                                                            OPTIONAL,
   . . .
DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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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
                                         DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD
USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE
   uSCH-ID
                                         USCH-ID,
   transportFormatSet
                                         TransportFormatSet
                                                             OPTIONAL,
   allocationRetentionPriority
                                         AllocationRetentionPriority OPTIONAL,
                                         CCTrCH-ID
   cCTrCH-ID
                                                             OPTIONAL,
   transportBearerRequestIndicator
                                         TransportBearerRequestIndicator,
   iE-Extensions
                                         ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
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
                                         OPTIONAL,
USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-ReconfPrepTDD ::= SEOUENCE
   rL-ID
                                         RL-ID,
   maxDL-Power
                                         DL-Power
                                                          OPTIONAL,
   minDL-Power
                                         DL-Power
                                                          OPTIONAL,
                                         iE-Extensions
                                                                                                          OPTIONAL,
RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
DSCH-InformationResponseList-RL-ReconfReady: = ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}
DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
   USCH-InformationResponseList-RL-ReconfReady: = ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}
USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse
                                                                                 PRESENCE mandatory }
      -- RADIO LINK RECONFIGURATION FAILURE
  *****************
RadioLinkReconfigurationFailure ::= SEOUENCE {
   protocolIEs
                       ProtocolIE-Container
                                           {{RadioLinkReconfigurationFailure-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}}
                                                                                                   OPTIONAL,
RadioLinkReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
   { ID
         id-CRNC-CommunicationContextID
                                                     CRITICALITY
                                                                   ignore
                                                                             TYPE
                                                                                                 CRNC-CommunicationContextID
                PRESENCE
                          mandatory }
          id-CauseLevel-RL-ReconfFailure CRITICALITY
                                                                   CauseLevel-RL-ReconfFailure
                                                                                                    PRESENCE mandatory
                                                  ignore
                                                            TYPE
         id-CriticalityDiagnostics
                                                                                                 CriticalityDiagnostics
    ID
                                                     CRITICALITY
                                                                   ignore
                                                                             TYPE
             PRESENCE
                     optional },
RadioLinkReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-RL-ReconfFailure ::= CHOICE {
   generalCause
                    GeneralCauseList-RL-ReconfFailure,
   rLSpecificCause
                    RLSpecificCauseList-RL-ReconfFailure,
GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
   cause
                                        ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }
   iE-Extensions
                                                                                                             OPTIONAL,
```

```
GeneralCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
   rL-ReconfigurationFailureList-RL-ReconfFailure
                                               RL-ReconfigurationFailureList-RL-ReconfFailure
                                                                                                     OPTIONAL,
   iE-Extensions
                                               OPTIONAL,
RLSpecificCauseItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-
ReconfigurationFailureItemIE-RL-ReconfFailure}}
RL-ReconfigurationFailureItemIE-RL-ReconfFailure NBAP-PROTOCOL-IES ::= {
         id-RL-ReconfigurationFailureItem-RL-ReconfFailure
                                                             CRITICALITY
                                                                                                   TYPE RL-
                                                                           ignore
ReconfigurationFailureItem-RL-ReconfFailure
                                            PRESENCE
                                                      mandatory}
RL-ReconfigurationFailureItem-RL-ReconfFailure ::= SEOUENCE {
   cause
                                         Cause,
                                         iE-Extensions
   OPTIONAL,
   . . .
RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RADIO LINK RECONFIGURATION COMMIT
  RadioLinkReconfigurationCommit ::= SEQUENCE
                                            {{RadioLinkReconfigurationCommit-IEs}},
   protocolIEs
                       ProtocolIE-Container
                       ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}
   protocolExtensions
                                                                                                     OPTIONAL,
RadioLinkReconfigurationCommit-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                                           NodeB-CommunicationContextID
                                            CRITICALITY
                                                          ignore
                                                                    TYPE
                                                                                                       PRESENCE mandatory } |
   { ID
         id-CFN
                                            CRITICALITY
                                                          ignore
                                                                    TYPE
                                                                                                                 PRESENCE
   mandatory } |
          id-Active-Pattern-Sequence-Information CRITICALITY
                                                                           Active-Pattern-Sequence-Information PRESENCE optional },
                                                          ignore
```

```
RadioLinkReconfigurationCommit-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   -- RADIO LINK RECONFIGURATION CANCEL
  *****************
RadioLinkReconfigurationCancel ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                {{RadioLinkReconfigurationCancel-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}
                                                                                                              OPTIONAL,
RadioLinkReconfigurationCancel-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-NodeB-CommunicationContextID
                                                CRITICALITY
                                                                          TYPE
                                                                                  NodeB-CommunicationContextID
                                                                                                                    PRESENCE mandatory },
                                                               ignore
   . . .
RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RECONFIGURATION REQUEST FDD
__ *********************
RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                {{RadioLinkReconfigurationRequestFDD-IEs}},
                         ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::=
          id-NodeB-CommunicationContextID
                                                       CRITICALITY
                                                                      reject
                                                                                  TYPE
                                                                                         NodeB-CommunicationContextID
                                                                                                                            PRESENCE
   mandatory } |
           id-UL-DPCH-Information-RL-ReconfRqstFDD
                                                        CRITICALITY
                                                                                  TYPE
                                                                                         UL-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                                 PRESENCE
                                                                       reject
   optional
   { ID
          id-DL-DPCH-Information-RL-ReconfRqstFDD
                                                       CRITICALITY
                                                                      reject
                                                                                  TYPE
                                                                                         DL-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                                 PRESENCE
   optional
          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-DCH-DeleteList-RL-ReconfRgstFDD
                                                                                                                               PRESENCE
    ID
                                                        CRITICALITY
                                                                      reject
                                                                                  TYPE
                                                                                         DCH-DeleteList-RL-ReconfRqstFDD
   optional
   { ID
          id-RL-InformationList-RL-ReconfRqstFDD
                                                       CRITICALITY
                                                                      reject
                                                                                  TYPE
                                                                                         RL-InformationList-RL-ReconfRqstFDD
                                                                                                                                 PRESENCE
   optional
              } |
```

```
{ ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY
                                                                                        Transmission-Gap-Pattern-Sequence-Information
                                                                     reject
                                                                                 TYPE
PRESENCE optional },
   . . .
RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
   ul-TFCS
                                                              OPTIONAL,
                                               ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } 
   iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-Information-RL-ReconfRgstFDD ::= SEQUENCE {
   dl-TFCS
                                               TFCS
                                                              OPTIONAL,
   tFCI-SignallingMode
                                               TFCI-SignallingMode
                                                                                    OPTIONAL,
   limitedPowerIncrease
                                               LimitedPowerIncrease
                                                                                    OPTIONAL,
   iE-Extensions
                                               OPTIONAL,
    . . .
DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD
DCH-DeleteItem-RL-ReconfRgstFDD ::= SEOUENCE {
   dCH-ID
   iE-Extensions
                                               OPTIONAL,
    . . .
DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfRqstFDD}}
RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
          id-RL-InformationItem-RL-ReconfRqstFDD
                                                                                                          RL-InformationItem-RL-
                                                          CRITICALITY
                                                                         reject
                                                                                        TYPE
ReconfRastFDD
                      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,
   iE-Extensions
                                             OPTIONAL.
RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
      -- RADIO LINK RECONFIGURATION REQUEST TDD
RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                {{RadioLinkReconfigurationRequestTDD-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}
                                                                                                               OPTIONAL.
RadioLinkReconfigurationRequestTDD-IES NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                               CRITICALITY
                                                                              reject
                                                                                                            TYPE NodeB-
CommunicationContextID
                                     PRESENCE
                                                mandatory
          id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                                   CRITICALITY
                                                                                  notify
                                                                                                               TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD
                                         PRESENCE
                                                    optional
          id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                                   CRITICALITY
                                                                                  notify
                                                                                                               TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD
                                         PRESENCE
                                                    optional
          id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                                   CRITICALITY
                                                                                  notify
                                                                                                               TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD
                                         PRESENCE
                                                    optional
          id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                                   CRITICALITY
                                                                                                               TYPE DL-CCTrCH-
                                                                                  notify
InformationDeleteList-RL-ReconfRgstTDD
                                         PRESENCE
                                                    optional
         id-TDD-DCHs-to-Modify
                                                    CRITICALITY
                                                                   reject
                                                                                  TYPE
                                                                                         TDD-DCHs-to-Modify
                                                                                                                       PRESENCE optional }
       { ID
             id-DCHs-to-Add-TDD
                                                        CRITICALITY
                                                                                      TYPE
                                                                                                            DCH-TDD-Information
                                                                       reject
   PRESENCE
              optional } |
          id-DCH-DeleteList-RL-ReconfRgstTDD
                                                                                                            TYPE DCH-DeleteList-RL-
   { ID
                                                               CRITICALITY
                                                                               reject
ReconfRastTDD
                             PRESENCE
                                         optional
   { ID
          id-RL-Information-RL-ReconfRqstTDD
                                                           CRITICALITY
                                                                           ignore
                                                                                         TYPE
                                                                                                            RL-Information-RL-ReconfRqstTDD
           PRESENCE
                    optional },
RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}
UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
```

```
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD
                                                                        CRITICALITY
                                                                                                                       TYPE UL-CCTrCH-
                                                                                        notify
InformationModifyItem-RL-ReconfRqstTDD
                                            PRESENCE
                                                        mandatory}
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                                    CCTrCH-ID,
    tFCS
                                                    TECS
                                                                    OPTIONAL,
    punctureLimit
                                                    PunctureLimit
                                                                    OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
   OPTIONAL,
UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}
UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
           id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                                        CRITICALITY
                                                                                        notify
                                                                                                                       TYPE UL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD
                                            PRESENCE
                                                        mandatory }
UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD ::= SEOUENCE {
    cCTrCH-ID
    iE-Extensions
                                                    ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs} }
    OPTIONAL,
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}
DL-CCTrCH-InformationModifyItemIE-RL-ReconfRgstTDD NBAP-PROTOCOL-IES ::=
           id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD
                                                                        CRITICALITY
                                                                                        notify
                                                                                                                       TYPE DL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD
                                            PRESENCE
                                                        mandatory }
DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD ::= SEOUENCE {
    cCTrCH-ID
                                                    CCTrCH-ID,
    tFCS
                                                    TFCS
                                                                    OPTIONAL,
    punctureLimit
                                                                    OPTIONAL,
                                                    PunctureLimit
                                                    ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
```

```
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRgstTDD}}
DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRgstTDD NBAP-PROTOCOL-IES ::= {
         id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                             CRITICALITY
                                                                                                     TYPE DL-CCTrCH-
                                                                           notify
InformationDeleteItem-RL-ReconfRqstTDD
                                     PRESENCE
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-ReconfRastTDD ::= SEOUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRastTDD
DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   dCH-ID
   iE-Extensions
                                            OPTIONAL,
DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
   rL-ID
                                         RL-ID,
                                                      OPTIONAL,
   maxDL-Power
                                         DL-Power
   minDL-Power
                                         DL-Power
                                                      OPTIONAL,
   iE-Extensions
                                         OPTIONAL,
RL-InformationItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RADIO LINK RECONFIGURATION RESPONSE
__ ***********************
```

```
RadioLinkReconfigurationResponse ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{RadioLinkReconfigurationResponse-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{RadioLinkReconfigurationResponse-Extensions}}
                                                                                                        OPTIONAL.
RadioLinkReconfigurationResponse-IES NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                     CRITICALITY ignore
                                                                                CRNC-CommunicationContextID
                                                                                                                       PRESENCE
   mandatory } |
   { ID
          id-RL-InformationResponseList-RL-ReconfRsp
                                                    CRITICALITY ignore
                                                                         TYPE
                                                                                RL-InformationResponseList-RL-ReconfRsp
                                                                                                                          PRESENCE
   optional
          id-CriticalityDiagnostics
                                                    CRITICALITY ignore
                                                                         TYPE
                                                                                CriticalityDiagnostics
                                                                                                                     PRESENCE
   { ID
   optional },
   . . .
RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponseList-RL-ReconfRsp ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-
ReconfRsp } }
RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
          id-RL-InformationResponseItem-RL-ReconfRsp
                                                                                                     RL-InformationResponseItem-RL-
                                                        CRITICALITY
                                                                      ignore
                                                                                    TYPE
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 ::= {
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 ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{RadioLinkDeletionRequest-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}}
                                                                                                       OPTIONAL,
RadioLinkDeletionRequest-IES NBAP-PROTOCOL-IES ::= {
         id-NodeB-CommunicationContextID
                                                     CRITICALITY
                                                                                  TYPE
                                                                                                       NodeB-CommunicationContextID
                                                                   reject
      PRESENCE mandatory
   { ID id-CRNC-CommunicationContextID
                                                                                                       CRNC-CommunicationContextID
                                                     CRITICALITY
                                                                   reject
                                                                                     TYPE
      PRESENCE
                 mandatory }
                                                                                                       RL-informationList-RL-
   { ID id-RL-informationList-RL-DeletionRqst
                                                     CRITICALITY
                                                                   notify
                                                                                  TYPE
DeletionRast
                     PRESENCE
                               mandatory
RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}
RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
         id-RL-informationItem-RL-DeletionRgst
                                                     CRITICALITY
                                                                   notify
                                                                                  TYPE
                                                                                                       RL-informationItem-RL-
DeletionRast
                        PRESENCE
                                   mandatory }
RL-informationItem-RL-DeletionRqst ::= SEQUENCE {
                                          iE-Extensions
RL-informationItem-RL-DeletionRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    -- RADIO LINK DELETION RESPONSE
__ **********************
RadioLinkDeletionResponse ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{RadioLinkDeletionResponse-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}
                                                                                                         OPTIONAL,
RadioLinkDeletionResponse-IES NBAP-PROTOCOL-IES ::= {
     ID
         id-CRNC-CommunicationContextID
                                              CRITICALITY
                                                            ignore
                                                                           TYPE
                                                                                  CRNC-CommunicationContextID
                                                                                                                    PRESENCE mandatory
```

```
{ ID
                                                                                                                         PRESENCE optional },
           id-CriticalityDiagnostics
                                                                                       CriticalityDiagnostics
                                                 CRITICALITY
                                                                 ignore
                                                                                TYPE
RadioLinkDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  -- DL POWER CONTROL REQUEST FDD
  DL-PowerControlRequest ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{DL-PowerControlRequest-IEs}},
                          ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
    . . .
DL-PowerControlRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                             CRITICALITY ignore
                                                                        TYPE
                                                                               NodeB-CommunicationContextID
                                                                                                                      PRESENCE mandatory
     ID id-PowerAdiustmentType
                                             CRITICALITY ignore TYPE PowerAdjustmentType
                                                                                                                   PRESENCE mandatory}
    { ID id-DLReferencePower
                                             CRITICALITY ignore TYPE DL-Power
                                                                                                                   PRESENCE conditional}
    -- This IE shall be present if the Adjustment Type IE is set to 'Common'
     ID id-InnerLoopDLPCStatus
                                             CRITICALITY ignore TYPE InnerLoopDLPCStatus
                                                                                                                   PRESENCE optional
    { ID id-DLReferencePowerList-DL-PC-Rqst
                                             CRITICALITY ignore TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional }
    -- This IE shall be present if the Adjustment Type IE is set to 'Individual'
                                                                                                              PRESENCE conditional }
   { ID id-MaxAdjustmentStep
                                             CRITICALITY ignore TYPE MaxAdjustmentStep
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
   { ID id-AdjustmentPeriod
                                             CRITICALITY ignore TYPE AdjustmentPeriod
                                                                                                              PRESENCE conditional } |
   -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentRatio
                                 CRITICALITY ignore TYPE ScaledAdjustmentRatio
                                                                                       PRESENCE conditional
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DL-ReferencePowerInformationList-DL-PC-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-ReferencePowerInformationItemIE-
DL-PC-Rqst }}
DL-ReferencePowerInformationItemIE-DL-PC-Rqst NBAP-PROTOCOL-IES ::= {
   { ID id-DL-ReferencePowerInformationItem-DL-PC-Rost
                                                                         ignore
                                                                                           DL-ReferencePowerInformationItem-DL-PC-Rgst
   PRESENCE
               mandatory
DL-ReferencePowerInformationItem-DL-PC-Rgst ::= SEOUENCE {
   rL-ID
                                         RL-ID,
```

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```
dl-ReferencePower
                                      DL-Power,
   iE-Extensions
                                      ProtocolExtensionContainer { { DL-ReferencePowerInformationItem-DL-PC-Rqst-ExtIEs } }
                                                                                                                     OPTIONAL.
DL-ReferencePowerInformationItem-DL-PC-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ****************
-- DL POWER TIMESLOT CONTROL REQUEST TDD
  DL-PowerTimeslotControlRequest ::= SEQUENCE {
                                             {{DL-PowerTimeslotControlRequest-IEs}},
   protocolIEs
                        ProtocolIE-Container
   protocolExtensions
                        ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}
                                                                                                        OPTIONAL,
DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
     ID id-NodeB-CommunicationContextID
                                             CRITICALITY ignore
                                                                      TYPE
                                                                           NodeB-CommunicationContextID
                                                                                                                PRESENCE mandatory
    { ID id-TimeslotISCPInfo
                                                               DL-TimeslotISCPInfo
                                                                                    PRESENCE optional }, -- Mandatory for 3.84Mcps TDD
                               CRITICALITY ignore
                                                        TYPE
only
DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   { ID id-TimeslotISCPInfoList-LCR-DL-PC-RgstTDD
                                               CRITICALITY ignore
                                                                   EXTENSION TimeslotISCPInfoList-LCR-DL-PC-RqstTDD
                                                                                                                           PRESENCE
optional }
TimeslotISCPInfoList-LCR-DL-PC-RqstTDD ::= SEQUENCE {
   dL-TimeslotISCP-LCR-Info DL-TimeslotISCPInfoLCR,
                                                     -- Mandatory for 1.28Mcps TDD only
   iE-Extensions
                            ProtocolExtensionContainer { TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs} }
                                                                                                           OPTIONAL,
   . . .
TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  -- DEDICATED MEASUREMENT INITIATION REQUEST
DedicatedMeasurementInitiationRequest ::= SEQUENCE {
```

```
{{DedicatedMeasurementInitiationRequest-IEs}},
                          ProtocolIE-Container
   protocolIEs
   protocolExtensions
                         ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
                                                                                                              OPTIONAL,
DedicatedMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
          id-NodeB-CommunicationContextID
                                                       CRITICALITY
                                                                                 TYPE
                                                                                         NodeB-CommunicationContextID
                                                                                                                           PRESENCE
                                                                      reject
   mandatory } |
   { ID
         id-MeasurementID
                                                       CRITICALITY
                                                                                 TYPE
                                                                                         Measurement TD
                                                                                                                              PRESENCE
                                                                      reject
   mandatory } |
          id-DedicatedMeasurementObjectType-DM-Rqst
                                                       CRITICALITY
                                                                      reject
                                                                                 TYPE
                                                                                         DedicatedMeasurementObjectType-DM-Rqst
                                                                                                                                 PRESENCE
   mandatory }
   -- This IE represents both the Dedicated Measurement Object Type IE and the choice based on the Dedicated Measurement Object Type
   -- as described in the tabular message format in subclause 9.1.
          id-DedicatedMeasurementType
                                                                                         DedicatedMeasurementType
                                                       CRITICALITY
                                                                      reject
                                                                                 TYPE
                                                                                                                           PRESENCE
   mandatory } |
   { ID
          id-MeasurementFilterCoefficient
                                                       CRITICALITY
                                                                      reject
                                                                                 TYPE
                                                                                         MeasurementFilterCoefficient
                                                                                                                              PRESENCE
   optional
   { ID
          id-ReportCharacteristics
                                                       CRITICALITY
                                                                      reject
                                                                                 TYPE
                                                                                         ReportCharacteristics
                                                                                                                           PRESENCE
   mandatory } |
   { ID
          id-CFNReportingIndicator
                                                       CRITICALITY
                                                                      reject
                                                                                 TYPE
                                                                                         FNReportingIndicator
                                                                                                                           PRESENCE
   mandatory }
   { ID
          id-CFN
                                                       CRITICALITY
                                                                      reject
                                                                                 TYPE
                                                                                         CFN
                                                                                                                           PRESENCE
optional
          } ,
DedicatedMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
                             RL-DM-Rqst,
   rL
   rLS
                             RL-Set-DM-Rqst,
   all-RL
                             AllRL-DM-Rast,
   all-RLS
                             AllRL-Set-DM-Rqst,
RL-DM-Rgst ::= SEOUENCE {
   rL-InformationList
                                     RL-InformationList-DM-Rqst,
   iE-Extensions
                                     OPTIONAL,
RLItem-DM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rgst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rgst }}
RL-InformationItemIE-DM-Rqst NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

```
RL-InformationItem-DM-Rgst ::= SEQUENCE {
      rL-ID
                                RL-ID,
      dPCH-ID
                                DPCH-ID
                                                 OPTIONAL.
                                ProtocolExtensionContainer { { RL-InformationItem-DM-Rqst-ExtIEs } }
      iE-Extensions
                                                                                                OPTIONAL,
RL-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   -- TDD only
   . . .
PUSCH-Info-DM-Rgst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID
RL-Set-DM-Rgst ::= SEQUENCE {
   rL-Set-InformationList-DM-Rgst
                                   RL-Set-InformationList-DM-Rgst,
   iE-Extensions
                                   OPTIONAL,
RL-SetItem-DM-Rgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rgst
                              ::= SEQUENCE (SIZE(1..maxNrOfRLSets)) OF RL-Set-InformationItem-DM-Rgst
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-Rgst ::= NULL
AllRL-Set-DM-Rqst ::= NULL
__ *********************
-- DEDICATED MEASUREMENT INITIATION RESPONSE
  ************************
DedicatedMeasurementInitiationResponse ::= SEQUENCE
   protocolIEs
                      ProtocolIE-Container
                                          {{DedicatedMeasurementInitiationResponse-IEs}},
   protocolExtensions
                      ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}
                                                                                                OPTIONAL,
```

```
DedicatedMeasurementInitiationResponse-IES NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                      CRITICALITY
                                                                               TYPE
                                                                                      CRNC-CommunicationContextID
                                                                                                                          PRESENCE
                                                                    ignore
   mandatory } |
   { ID
        id-MeasurementID
                                                      CRITICALITY
                                                                    ignore
                                                                               TYPE
                                                                                      MeasurementID
                                                                                                                          PRESENCE
   mandatory } |
         id-DedicatedMeasurementObjectType-DM-Rsp
                                                      CRITICALITY
                                                                    ignore
                                                                               TYPE
                                                                                      DedicatedMeasurementObjectType-DM-Rsp
                                                                                                                         PRESENCE
   optional } |
         id-CriticalityDiagnostics
                                                                               TYPE
                                                                                      CriticalityDiagnostics
                                                                                                                       PRESENCE
   { ID
                                                     CRITICALITY
                                                                    ignore
   optional },
DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
                            RL-DM-Rsp,
   rLS
                            RL-Set-DM-Rsp,
   all-RL
                            RL-DM-Rsp,
   all-RLS
                            RL-Set-DM-Rsp.
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 {
   rL-ID
                                   RL-ID,
   dPCH-ID
                                   DPCH-ID
                                                  OPTIONAL,
   dedicatedMeasurementValue
                                   DedicatedMeasurementValue,
                                                  OPTIONAL,
                                   iE-Extensions
                                                                                                          OPTIONAL,
RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ID id-PUSCH-Info-DM-Rsp
                                   CRITICALITY reject
                                                                  EXTENSION
                                                                                                                   PRESENCE optional },
                                                                             PUSCH-Info-DM-Rsp
   -- TDD only
   . . .
PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID
RL-Set-DM-Rsp ::= SEOUENCE {
   rL-Set-InformationList-DM-Rsp
                                      RL-Set-InformationList-DM-Rsp,
   iE-Extensions
                                      ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } }
                                                                                                                   OPTIONAL,
RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}
RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp
                                              CRITICALITY ignore
                                                                      TYPE
                                                                             RL-Set-InformationItem-DM-Rsp
                                                                                                                PRESENCE mandatory }
RL-Set-InformationItem-DM-Rsp ::= SEOUENCE {
   rL-Set-ID
                                  RL-Set-ID,
   dedicatedMeasurementValue
                                   DedicatedMeasurementValue,
   CFN
                                                  OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- DEDICATED MEASUREMENT INITIATION FAILURE
   DedicatedMeasurementInitiationFailure ::= SEQUENCE {
                                                  {{DedicatedMeasurementInitiationFailure-IEs}},
   protocolIEs
                           ProtocolIE-Container
                           ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
   protocolExtensions
                                                                                                                   OPTIONAL,
DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                                                         CRNC-CommunicationContextID
                                                                                                                         PRESENCE mandatory
                                                  CRITICALITY
                                                                  ignore
                                                                                 TYPE
     ID
           id-MeasurementID
                                                  CRITICALITY
                                                                  ignore
                                                                                 TYPE
                                                                                         MeasurementID
                                                                                                                            PRESENCE mandatory
     ID
           id-Cause
                                                  CRITICALITY
                                                                  ignore
                                                                                 TYPE
                                                                                         Cause
                                                                                                                                 PRESENCE
   mandatory } |
```

```
RL-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RL-InformationItem-DM-Rprt ::= SEQUENCE {
   rI.-ID
                              RL-ID.
   dPCH-ID
                              DPCH-ID
                                        OPTIONAL,
   dedicatedMeasurementValueInformation DedicatedMeasurementValueInformation,
                              ProtocolExtensionContainer { { RL-InformationItem-DM-Rprt-ExtIEs } }
   iE-Extensions
                                                                                                  OPTIONAL,
RL-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-PUSCH-Info-DM-Rprt
                                                                                                   PRESENCE optional },
                            CRITICALITY reject
                                                        EXTENSION PUSCH-Info-DM-Rprt
   -- TDD only
   . . .
PUSCH-Info-DM-Rprt ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID
RL-Set-DM-Rprt ::= SEQUENCE {
                                 RL-Set-InformationList-DM-Rprt,
   rL-Set-InformationList-DM-Rprt
                                 iE-Extensions
                                                                                                  OPTIONAL,
RL-SetItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rprt }}
RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
   rL-Set-ID
                              RL-Set-ID,
   dedicatedMeasurementValueInformation
                                    DedicatedMeasurementValueInformation,
                              ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- DEDICATED MEASUREMENT TERMINATION REQUEST
__ *********************************
```

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```
DedicatedMeasurementTerminationRequest ::= SEQUENCE
   protocolIEs
                         ProtocolIE-Container
                                               {{DedicatedMeasurementTerminationRequest-IEs}},
   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
                                                                                   MeasurementID
                                                                                                                       PRESENCE mandatory
   . . .
DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    -- DEDICATED MEASUREMENT FAILURE INDICATION
        DedicatedMeasurementFailureIndication ::= SEQUENCE
   protocolIEs
                         ProtocolIE-Container
                                               {{DedicatedMeasurementFailureIndication-IEs}},
                         ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL,
DedicatedMeasurementFailureIndication-IES NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                           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
    },
DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK FAILURE INDICATION
  ******************
RadioLinkFailureIndication ::= SEOUENCE {
   protocolIEs
                         ProtocolIE-Container
                                              {{RadioLinkFailureIndication-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}
                                                                                                            OPTIONAL,
```

```
RadioLinkFailureIndication-IES NBAP-PROTOCOL-IES ::= {
           id-CRNC-CommunicationContextID
                                                      CRITICALITY
                                                                     ignore
                                                                                     TYPE
                                                                                            CRNC-CommunicationContextID
                                                                                                                                PRESENCE
    mandatory } |
           id-Reporting-Object-RL-FailureInd
    { ID
                                                                     ignore
                                                                                            Reporting-Object-RL-FailureInd
                                                      CRITICALITY
                                                                                     TYPE
                                                                                                                             PRESENCE mandatory
    . . .
RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Reporting-Object-RL-FailureInd ::= CHOICE {
                          RL-RL-FailureInd,
   rL-Set
                          RL-Set-RL-FailureInd,
    cCTrCH
                          CCTrCH-RL-FailureInd
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 ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}
RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
         id-RL-InformationItem-RL-FailureInd
                                                      CRITICALITY
                                                                     ignore
                                                                                            RL-InformationItem-RL-FailureInd
                                                                                                                                   PRESENCE
    mandatory}
RL-InformationItem-RL-FailureInd ::= SEQUENCE {
   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 ::= SEOUENCE {
                                              RL-Set-InformationList-RL-FailureInd,
   rL-Set-InformationList-RL-FailureInd
   iE-Extensions
                                          ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } }
                                                                                                                  OPTIONAL,
```

```
RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-FailureInd
} }
RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
   TYPE RL-Set-InformationItem-RL-FailureInd
                                                                                                             PRESENCE mandatory }
RL-Set-InformationItem-RL-FailureInd ::= SEOUENCE {
                         RL-Set-ID,
   rL-Set-ID
   cause
                         Cause,
                         iE-Extensions
RL-Set-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-RL-FailureInd ::= SEQUENCE {
                                           RL-ID,
   cCTrCH-InformationList-RL-FailureInd
                                           CCTrCH-InformationList-RL-FailureInd,
   iE-Extensions
                                       ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }
                                                                                                           OPTIONAL,
CCTrCHItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd}}
CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
          id-CCTrCH-InformationItem-RL-FailureInd
                                                      CRITICALITY
                                                                     ignore
                                                                                   TYPE
                                                                                                         CCTrCH-InformationItem-RL-
FailureInd
                  PRESENCE
                            mandatory}
CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
   cCTrCH-ID
                                           CCTrCH-ID.
   cause
                                           Cause,
   iE-Extensions
                                           ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } }
CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
-- RADIO LINK PREEMPTION REQUIRED INDICATION
__ *********************
RadioLinkPreemptionRequiredIndication ::= SEOUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{RadioLinkPreemptionRequiredIndication-IEs}},
                              ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
   { ID id-CRNC-CommunicationContextID
                                                  CRITICALITY
                                                                ignore
                                                                                                 CRNC-CommunicationContextID
      PRESENCE mandatory
   RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-PreemptRequiredInd
                                          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIE-RL-
PreemptRequiredInd}}
RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
    ID id-RL-InformationItem-RL-PreemptRequiredInd
                                              CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptReguiredInd
                                                                                                             PRESENCE mandatory
RL-InformationItem-RL-PreemptRequiredInd::= SEQUENCE {
   iE-Extensions
                          ProtocolExtensionContainer { {RL-InformationItem-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
RL-InformationItem-RL-PreemptRequiredInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RESTORE INDICATION
  RadioLinkRestoreIndication ::= SEOUENCE {
                     ProtocolIE-Container {{RadioLinkRestoreIndication-IEs}},
   protocolIEs
   protocolExtensions
                    ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}
                                                                                                   OPTIONAL,
```

```
RadioLinkRestoreIndication-IES NBAP-PROTOCOL-IES ::= {
          id-CRNC-CommunicationContextID
                                                  CRITICALITY
                                                                 ignore
                                                                               TYPE
                                                                                      CRNC-CommunicationContextID
                                                                                                                        PRESENCE
   mandatory } |
          id-Reporting-Object-RL-RestoreInd
   { ID
                                                                 ignore
                                                                                      Reporting-Object-RL-RestoreInd
                                                  CRITICALITY
                                                                               TYPE
                                                                                                                     PRESENCE mandatory
   },
   . . .
RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
Reporting-Object-RL-RestoreInd ::= CHOICE {
                        RL-RL-RestoreInd,
   rL-Set
                         RL-Set-RL-RestoreInd,
   cCTrCH
                         CCTrCH-RL-RestoreInd
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-RL-InformationItem-RL-RestoreInd
                                                  CRITICALITY
                                                                 ignore
                                                                                      RL-InformationItem-RL-RestoreInd
                                                                                                                           PRESENCE
   mandatory}
RL-InformationItem-RL-RestoreInd ::= SEQUENCE {
                                       RL-ID,
                                       iE-Extensions
RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-RL-RestoreInd ::= SEQUENCE {
   rL-Set-InformationList-RL-RestoreInd
                                       RL-Set-InformationList-RL-RestoreInd,
                                       ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } }
   iE-Extensions
                                                                                                           OPTIONAL,
   . . .
```

```
RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-RestoreInd
}}
RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
   TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory }
RL-Set-InformationItem-RL-RestoreInd ::= SEOUENCE {
   rL-Set-ID
                        RL-Set-ID,
   iE-Extensions
                        ProtocolExtensionContainer { { RL-Set-InformationItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CCTrCH-RL-RestoreInd ::= SEQUENCE {
                                          RL-ID,
   cCTrCH-InformationList-RL-RestoreInd
                                          CCTrCH-InformationList-RL-RestoreInd,
   iE-Extensions
                                      ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }
                                                                                                        OPTIONAL,
CCTrCHItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
CCTrCH-InformationList-RL-RestoreInd ::= 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
                                                                                 TYPE
                                                                                                      CCTrCH-InformationItem-RL-
                                                                   ignore
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 {
   protocolIEs
                           ProtocolIE-Container
                                                   {{CompressedModeCommand-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}
                                                                                                             OPTIONAL,
CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
           id-NodeB-CommunicationContextID
                                                   CRITICALITY
                                                                      ignore
                                                                                  TYPE
                                                                                          NodeB-CommunicationContextID
                                                                                                                               PRESENCE
   mandatory
           id-Active-Pattern-Sequence-Information CRITICALITY
                                                                      ignore
                                                                                          Active-Pattern-Sequence-Information
                                                                                                                               PRESENCE mandatory
    { ID
                                                                                  TYPE
    . . .
CompressedModeCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
-- ERROR INDICATION
__ *********************
ErrorIndication ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                 {{ErrorIndication-IEs}},
                           ProtocolExtensionContainer {{ErrorIndication-Extensions}}
   protocolExtensions
                                                                                          OPTIONAL,
ErrorIndication-IEs NBAP-PROTOCOL-IES ::= {
                                                                                      CRNC-CommunicationContextID
           id-CRNC-CommunicationContextID
                                               CRITICALITY
                                                              ignore
                                                                              TYPE
                                                                                                                       PRESENCE optional
     ID
           id-NodeB-CommunicationContextID
                                               CRITICALITY
                                                              ignore
                                                                              TYPE
                                                                                      NodeB-CommunicationContextID
                                                                                                                       PRESENCE optional }
     ID
           id-Cause
                                               CRITICALITY
                                                              ignore
                                                                              TYPE
                                                                                      Cause
                                                                                                                                  PRESENCE
    optional
    { ID
           id-CriticalityDiagnostics
                                              CRITICALITY
                                                              ignore
                                                                              TYPE
                                                                                      CriticalityDiagnostics
                                                                                                                         PRESENCE optional },
    . . .
ErrorIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
****************
-- PRIVATE MESSAGE
__ *********************
PrivateMessage ::= SEOUENCE {
                 PrivateIE-Container {{PrivateMessage-IEs}},
   privateIEs
   . . .
PrivateMessage-IEs NBAP-PRIVATE-IES ::= {
  ******************
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
  ****************
PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
                     ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
   protocolIEs
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}
                                                                                                          OPTIONAL,
PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
   { ID
          id-C-ID
                                                  CRITICALITY
                                                                reject
                                                                               TYPE
                                                                                      C-ID
   PRESENCE
              mandatory } |
   { ID
          id-SFN
                                                  CRITICALITY
                                                                reject
                                                                               TYPE
                                                                                      SFN
   PRESENCE
              optional} |
          id-PDSCHSets-AddList-PSCH-ReconfRqst
                                                  CRITICALITY
                                                                reject
                                                                               TYPE
                                                                                      PDSCHSets-AddList-PSCH-ReconfRqst
                                                                                                                          PRESENCE
   optional
         id-PDSCHSets-ModifyList-PSCH-ReconfRqst
                                                                               TYPE
                                                                                      PDSCHSets-ModifyList-PSCH-ReconfRqst
   { ID
                                                  CRITICALITY
                                                                reject
                                                                                                                          PRESENCE
   optional } |
   { ID
          id-PDSCHSets-DeleteList-PSCH-ReconfRqst
                                                  CRITICALITY
                                                                reject
                                                                               TYPE
                                                                                      PDSCHSets-DeleteList-PSCH-ReconfRqst
                                                                                                                          PRESENCE
   optional } |
   { ID
          id-PUSCHSets-AddList-PSCH-ReconfRqst
                                                  CRITICALITY
                                                                reject
                                                                               TYPE
                                                                                      PUSCHSets-AddList-PSCH-ReconfRqst
                                                                                                                          PRESENCE
   optional } |
   { ID
          id-PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                                               TYPE
                                                                                      PUSCHSets-ModifyList-PSCH-ReconfRqst
                                                  CRITICALITY
                                                                reject
                                                                                                                          PRESENCE
   optional
   { ID
         id-PUSCHSets-DeleteList-PSCH-ReconfRqst
                                                  CRITICALITY
                                                                reject
                                                                               TYPE
                                                                                      PUSCHSets-DeleteList-PSCH-ReconfRqst
                                                                                                                          PRESENCE
   optional
   . . .
PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst
PDSCHSets-AddItem-PSCH-ReconfRqst
                                     ::= SEOUENCE {
                                                PDSCHSet-ID.
    pDSCHSet-ID
                                                PDSCH-Information-AddList-PSCH-ReconfRgst OPTIONAL,
    pDSCH-InformationList
    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-PSCH-ReconfRgst
                                                                                                                                            PRESENCE
    optional}
PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}
3.84Mcps TDD only
PDSCH-Information-AddListIEs-PSCH-ReconfRqst
                                                NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject
                                                                                TYPE
                                                                                        PDSCH-Information-AddItem-PSCH-ReconfRqst
                                                                                                                                         PRESENCE
    mandatory }
PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod,
    repetitionLength
                                            RepetitionLength,
    tdd-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-PSCH-ReconfRqst
                                                                DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions
                                                ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                      OPTIONAL,
        . . .
PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst
DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
                                            TFCI-Presence,
    tFCI-Presence
    dL-Code-InformationAddList-PSCH-ReconfRqst
                                                            DL-Code-InformationAddList-PSCH-ReconfRqst,
                                            ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRgst-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
DL-Timeslot-InformationAddItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst
```

```
DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID
                                          PDSCH-ID.
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocoliE-Single-Container {{ PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }} -- Mandatory
for 1.28Mcps TDD only
PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRgst NBAP-PROTOCOL-IES ::= {
    PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE
               optional}
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} }
PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
    . . .
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,
                                          TFCI-Presence,
   tFCI-Presence
   dL-Code-InformationAddList-LCR-PSCH-ReconfRqst
                                                              DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                       OPTIONAL,
DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst
DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID
                                          PDSCH-ID,
    tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
    iE-Extensions
                                          ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                    OPTIONAL,
```

```
DL-Code-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCHSets-ModifyList-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRgst
PDSCHSets-ModifyItem-PSCH-ReconfRast
                                       ::= SEOUENCE {
   pDSCHSet-ID
                                              PDSCHSet-ID,
   pDSCH-InformationList
                                              PDSCH-Information-ModifyList-PSCH-ReconfRqst,
                                              ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject
                                                                             EXTENSION PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE
               optional -- Mandatory for 1.28Mcps TDD only
PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}
PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    TYPE
                                                                                         PDSCH-Information-ModifyItem-PSCH-ReconfRgst
               optional } -- Mandatory for 3.84Mcps TDD only
    PRESENCE
PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   repetitionPeriod
                                          RepetitionPeriod
                                                                             OPTIONAL,
   repetitionLength
                                                                             OPTIONAL,
                                          RepetitionLength
    tdd-PhysicalChannelOffset
                                              TDD-PhysicalChannelOffset
                                                                             OPTIONAL,
   dL-Timeslot-InformationModifyList-PSCH-ReconfRqst
                                                                 DL-Timeslot-InformationModifyList-PSCH-ReconfRqst
   iE-Extensions
                                              ProtocolExtensionContainer { { PDSCH-Information-ModifyItem-PSCH-ReconfRgst-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 ::= SEOUENCE {
   timeSlot
                                          TimeSlot,
   midambleShiftAndBurstType
                                          MidambleShiftAndBurstType
                                                                     OPTIONAL,
   tFCI-Presence
                                          TFCI-Presence OPTIONAL,
   dL-Code-InformationModifyList-PSCH-ReconfRqst
                                                              DL-Code-InformationModifyList-PSCH-ReconfRqst
                                                                                                                  OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                      OPTIONAL.
```

```
DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEOUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst
DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   pDSCH-ID
    tdd-ChannelisationCode
                                          TDD-ChannelisationCode,
   iE-Extensions
                                          DL-Code-InformationModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst
                                                                     CRITICALITY reject
                                                                                            TYPE
                                                                                                                PDSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst
                                  PRESENCE
                                              mandatory }
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
   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-InformationModifyItem-PSCH-ReconfRqst
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR
                                                             OPTIONAL,
    tFCI-Presence
                                          TFCI-Presence OPTIONAL,
   dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                 DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst
                                          ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-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-ReconfRgst-ExtIEs} }
                                                                                                                                 OPTIONAL.
DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst
                                      ::= SEQUENCE {
PDSCHSets-DeleteItem-PSCH-ReconfRqst
   pDSCHSet-ID
                                            PDSCHSet-ID,
                                            iE-Extensions
PDSCHSets-DeleteItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst
PUSCHSets-AddItem-PSCH-ReconfRqst
                                  ::= SEOUENCE {
   pUSCHSet-ID
                                            PUSCHSet-ID,
   pUSCH-InformationList
                                            PUSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
                                            iE-Extensions
                                                                                                                   OPTIONAL,
   . . .
PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
   {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst
                                                    CRITICALITY reject
                                                                          EXTENSION PUSCH-AddInformation-LCR-PSCH-ReconfRqst
                                                                                                                                 PRESENCE
   optional } -- Mandatory for 1.28Mcps TDD only
PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only
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-ReconfRqst
                                                           UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
   iE-Extensions
                                            ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                            OPTIONAL,
```

```
PUSCH-Information-AddItem-PSCH-ReconfRqst-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,
    uL-Code-InformationAddList-PSCH-ReconfRgst
                                                          UL-Code-InformationAddList-PSCH-ReconfRgst,
                                          ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }
    iE-Extensions
                                                                                                                                   OPTIONAL,
UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) 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-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }}
PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    TYPE
                                                                                            PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE
               optional}
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                          RepetitionPeriod,
    repetitionLength
                                          RepetitionLength,
    tdd-PhysicalChannelOffset
                                          TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRgst
                                                                 UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRgst,
    iE-Extensions
                                              ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                      OPTIONAL,
        . . .
PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
```

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```
UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRast ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRast
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRgst ::= SEOUENCE {
    timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
                                          TFCI-Presence,
   tFCI-Presence
   uL-Code-InformationAddList-LCR-PSCH-ReconfRqst
                                                             UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                      OPTIONAL,
UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Code-InformationAddList-LCR-PSCH-ReconfRgst ::= SEOUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRgst
UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
   pUSCH-ID
                                          PUSCH-ID.
   tdd-ChannelisationCodeLCR
                                          TDD-ChannelisationCodeLCR,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }
                                                                                                                                   OPTIONAL,
    . . .
UL-Code-InformationAddItem-LCR-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst
PUSCHSets-ModifyItem-PSCH-ReconfRqst
                                       ::= SEOUENCE {
   pUSCHSet-ID
                                              PUSCHSet-ID,
   pUSCH-InformationList
                                              PUSCH-Information-ModifyList-PSCH-ReconfRgst
                                                                                            OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject
                                                                             EXTENSION PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE
               optional -- For 1.28Mcps TDD only
PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }} -- For 3.84Mcps
TDD only
PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    TYPE
                                                                                        PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE
               mandatory}
```

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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 ::= SEOUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRgst
UL-Timeslot-InformationModifyItem-PSCH-ReconfRgst ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType
                                                                        OPTIONAL,
    tFCI-Presence
                                            TFCI-Presence
                                                            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 ::= SEQUENCE (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
    . . .
UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCH-ModifyInformation-LCR-PSCH-ReconfRgst ::= ProtocolIE-Single-Container {{ PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRgst }}
PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRast
                                                                        CRITICALITY reject
                                                                                                 TYPE
                                                                                                                     PUSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst
                                    PRESENCE
                                                optional}
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod
                                            RepetitionPeriod
                                                                    OPTIONAL,
    repetitionLength
                                            RepetitionLength
                                                                    OPTIONAL,
    tdd-PhysicalChannelOffset
                                            TDD-PhysicalChannelOffset
                                                                        OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst
                                                                        UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst
                                                                                                                                   OPTIONAL,
```

```
ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
   iE-Extensions
   OPTIONAL,
       . . .
PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst
UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   t.FCI-Presence
                                          TFCI-Presence
                                                             OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst
                                                             UL-Code-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..maxNrOfPDSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst
UL-Code-LCR-InformationModifyItem-PSCH-ReconfRgst ::= SEQUENCE {
   pUSCH-ID
                                          PUSCH-ID,
   tdd-ChannelisationCodeLCR
                                              TDD-ChannelisationCodeLCR,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRgst-ExtIEs} }
                                                                                                                                      OPTIONAL,
UL-Code-LCR-InformationModifyItem-PSCH-ReconfRgst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst
PUSCHSets-DeleteItem-PSCH-ReconfRqst
                                       ::= SEOUENCE {
   pUSCHSet-ID
                                              PUSCHSet-ID,
                                              iE-Extensions
                                                                                                                           OPTIONAL,
PUSCHSets-DeleteItem-PSCH-ReconfRast-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE TDD
```

```
********************
PhysicalSharedChannelReconfigurationResponseTDD ::= SEQUENCE {
                      ProtocolIE-Container {{PhysicalSharedChannelReconfigurationResponseTDD-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponseTDD-Extensions}}
                                                                                                                           OPTIONAL,
PhysicalSharedChannelReconfigurationResponseTDD-IES NBAP-PROTOCOL-IES ::= {
          id-CriticalityDiagnostics
                                        CRITICALITY
                                                                              CriticalityDiagnostics
                                                                                                              PRESENCE optional },
   . . .
PhysicalSharedChannelReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
__ ********************
-- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE TDD
__ *********************
PhysicalSharedChannelReconfigurationFailureTDD ::= SEQUENCE {
                      ProtocolIE-Container {{PhysicalSharedChannelReconfigurationFailureTDD-IEs}},
   protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailureTDD-Extensions}}
                                                                                                                          OPTIONAL,
PhysicalSharedChannelReconfigurationFailureTDD-IES NBAP-PROTOCOL-IES ::= {
          id-CauseLevel-PSCH-ReconfFailureTDD
                                                CRITICALITY ignore TYPE CauseLevel-PSCH-ReconfFailureTDD
                                                                                                            PRESENCE mandatory } |
          id-CriticalityDiagnostics
                                                                                                            PRESENCE optional },
    { ID
                                        CRITICALITY ignore
                                                               TYPE
                                                                      CriticalityDiagnostics
PhysicalSharedChannelReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CauseLevel-PSCH-ReconfFailureTDD ::= CHOICE {
   generalCause
                         GeneralCauseList-PSCH-ReconfFailureTDD,
   setSpecificCause
                         SetSpecificCauseList-PSCH-ReconfFailureTDD,
GeneralCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
   cause
   iE-Extensions
                             ProtocolExtensionContainer { GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs} }
                                                                                                              OPTIONAL,
```

```
GeneralCauseItem-PSCH-ReconfFailureTDD-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} }
                                                                                                                                           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 ::= SEOUENCE {
                           PDSCHSet-ID,
    pDSCHSet-ID
                           Cause,
    cause
                           ProtocolExtensionContainer { {Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }
    iE-Extensions
Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD ::= SEOUENCE (SIZE (0.. maxNrOfPUSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PUSCHSetItemIE-PSCH-ReconfFailureTDD }}
Unsuccessful-PUSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
           id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory }
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
   pUSCHSet-ID
                           PUSCHSet-ID,
    cause
    iE-Extensions
                           ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} }
Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
__ **********************
-- RESET REQUEST
  ResetRequest ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                         {{ResetRequest-IEs}},
   protocolExtensions
                      ProtocolExtensionContainer {{ResetRequest-Extensions}}
                                                                      OPTIONAL,
ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
   {ID id-ResetIndicator
                         CRITICALITY ignore
                                            TYPE
                                                   ResetIndicator
                                                                   PRESENCE
                                                                            mandatory },
   . . .
ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
ResetIndicator ::= CHOICE {
   communicationContext
                            CommunicationContextList-Reset,
   communicationControlPort
                            CommunicationControlPortList-Reset,
                            NULL,
   nodeB
CommunicationContextList-Reset ::= SEQUENCE {
   communicationContextInfoList-Reset
                                   CommunicationContextInfoList-Reset,
   iE-Extensions
                                   ProtocolExtensionContainer { {CommunicationContextItem-Reset-ExtIEs} }
CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationContextInfoItemIE-Reset }}
```

```
CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationContextInfoItem-Reset
                                                    CRITICALITY reject
                                                                            TYPE CommunicationContextInfoItem-Reset
                                                                                                                       PRESENCE mandatory }
CommunicationContextInfoItem-Reset ::= SEQUENCE {
    communicationContextType-Reset
                                            CommunicationContextType-Reset,
    iE-Extensions
                                            ProtocolExtensionContainer { { CommunicationContextInfoItem-Reset-ExtIEs} }
                                                                                                                             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
                                                ProtocolExtensionContainer { CommunicationControlPortItem-Reset-ExtIEs} }
                                                                                                                                OPTIONAL,
CommunicationControlPortItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationControlPortInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCCPinNodeB)) OF ProtocolIE-Single-Container {{CommunicationControlPortInfoItemIE-
Reset }}
CommunicationControlPortInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationControlPortInfoItem-Reset
                                                        CRITICALITY reject
                                                                                TYPE CommunicationControlPortInfoItem-Reset
                                                                                                                                PRESENCE mandatory }
CommunicationControlPortInfoItem-Reset ::= SEQUENCE {
    communicationControlPortID
                                        CommunicationControlPortID,
```

```
iE-Extensions
                                  ProtocolExtensionContainer { {CommunicationControlPortInfoItem-Reset-ExtIEs} } OPTIONAL,
CommunicationControlPortInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RESET RESPONSE
  *****************
ResetResponse ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                             {{ResetResponse-IEs}},
                       ProtocolExtensionContainer {{ResetResponse-Extensions}}
   protocolExtensions
                                                                                   OPTIONAL,
ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
   {ID id-CriticalityDiagnostics
                                  CRITICALITY
                                                          TYPE
                                                               CriticalityDiagnostics
                                                                                                      PRESENCE optional },
                                                ignore
   . . .
ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    -- INFORMATION EXCHANGE INITIATION REQUEST
  InformationExchangeInitiationRequest ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                             {{InformationExchangeInitiationRequest-IEs}},
                       ProtocolExtensionContainer {{InformationExchangeInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                      OPTIONAL,
InformationExchangeInitiationRequest-IES NBAP-PROTOCOL-IES ::= {
         id-InformationExchangeID
                                                                                                    InformationExchangeID
   { ID
                                                          CRITICALITY reject
                                                                                   TYPE
          PRESENCE mandatory } |
   { ID
          id-InformationExchangeObjectType-InfEx-Rqst
                                                       CRITICALITY reject
                                                                               TYPE
                                                                                                    InformationExchangeObjectType-
InfEx-Rqst
             PRESENCE mandatory } |
   -- This IE represents both the Information Exchange Object Type IE and the choice based on the Information Exchange Object Type
   -- as described in the tabular message format in subclause 9.1.
```

```
{ 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-Rqst,
    . . .
Cell-InfEx-Rgst ::= 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 {
                                                  {{InformationExchangeInitiationResponse-IEs}},
                          ProtocolIE-Container
   protocolIEs
                          ProtocolExtensionContainer {{InformationExchangeInitiationResponse-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
           id-InformationExchangeID
                                                             CRITICALITY ignore
                                                                                        TYPE
                                                                                                               InformationExchangeID
           PRESENCE
                      mandatory }|
           id-InformationExchangeObjectType-InfEx-Rsp
   { ID
                                                         CRITICALITY ignore
                                                                                    TYPE
                                                                                            InformationExchangeObjectType-InfEx-Rsp
                                                                                                                                      PRESENCE
   mandatory } |
       { 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,
                                ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs} }
   iE-Extensions
                                                                                                          OPTIONAL,
CellItem-InfEx-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ****************
-- INFORMATION EXCHANGE INITIATION FAILURE
    InformationExchangeInitiationFailure ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{InformationExchangeInitiationFailure-IEs}},
                        ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}}
   protocolExtensions
                                                                                                          OPTIONAL,
   . . .
InformationExchangeInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
                                                                                                               PRESENCE mandatory
     ID
          id-InformationExchangeID
                                              CRITICALITY
                                                             ignore
                                                                           TYPE
                                                                                  InformationExchangeID
          id-Cause
                                                                                                               PRESENCE mandatory
     ID
                                       CRITICALITY
                                                      ignore
                                                                    TYPE
                                                                           Cause
          id-CriticalityDiagnostics
                                                                           CriticalityDiagnostics
                                                                                                          PRESENCE optional },
    { ID
                                       CRITICALITY
                                                     ignore
                                                                    TYPE
   . . .
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-Inf-Rprt,
   . . .
Cell-Inf-Rprt ::= SEOUENCE {
   requestedDataValueInformation RequestedDataValueInformation,
                               ProtocolExtensionContainer {{ CellItem-Inf-Rprt-ExtIEs }}
   iE-Extensions
                                                                                                      OPTIONAL,
CellItem-Inf-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  *****************
-- INFORMATION EXCHANGE TERMINATION REQUEST
     ******************
InformationExchangeTerminationRequest ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{InformationExchangeTerminationRequest-IEs}},
                        ProtocolExtensionContainer {{InformationExchangeTerminationRequest-Extensions}}
                                                                                                         OPTIONAL,
   protocolExtensions
InformationExchangeTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
          id-InformationExchangeID
   { ID
                                          CRITICALITY
                                                        ignore
                                                                          TYPE
                                                                                 InformationExchangeID
                                                                                                           PRESENCE mandatory },
   . . .
InformationExchangeTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ******************
-- INFORMATION EXCHANGE FAILURE INDICATION
    ***********************
InformationExchangeFailureIndication ::= SEQUENCE {
```

```
ProtocolIE-Container
                                                 {{InformationExchangeFailureIndication-IEs}},
    protocolIEs
   protocolExtensions
                              ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}
                                                                                                                       OPTIONAL,
InformationExchangeFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
           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-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationInitiationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID
                                          CRITICALITY
                                                                                                                       PRESENCE mandatory
                                                         reject
                                                                     TYPE
           id-cellSyncBurstRepetitionPeriod
                                                                                TYPE
                                                                                        CellSyncBurstRepetitionPeriod
                                                                                                                      PRESENCE mandatory
     ID
                                                     CRITICALITY
                                                                     reject
     ID
           id-timeslotInfo-CellSyncInitiationRqstTDD CRITICALITY
                                                                     reject
                                                                                TYPE
                                                                                        TimeslotInfo-CellSyncInitiationRqstTDD
    mandatory } |
    { ID
           id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD
                                                                                                               CellSyncBurstTransInit-
                                                                 CRITICALITY
                                                                                reject
                                                                                            TYPE
CellSyncInitiationRqstTDD
                              PRESENCE
                                          optional
          id-CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD
                                                                     CRITICALITY
                                                                                    reject
                                                                                                               TYPE CellSyncBurstMeasureInit-
CellSyncInitiationRgstTDD
                              PRESENCE
                                          optional
CellSyncBurstTransInit-CellSyncInitiationRqstTDD::= SEQUENCE {
    cSBTransmissionID
                                          CSBTransmissionID,
    sfn
    cellSvncBurstCode
                                          CellSyncBurstCode,
    cellSyncBurstCodeShift
                                          CellSyncBurstCodeShift,
    initialDLTransPower
                                          DL-Power,
                                          ProtocolExtensionContainer { { CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs} }
   iE-Extensions
```

```
CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TimeslotInfo-CellSyncInitiationRgstTDD::= SEQUENCE (SIZE (1..15)) OF TimeSlot
CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD::= SEQUENCE {
   cSBMeasurementID
                                      CSBMeasurementID,
   cellSyncBurstCode
                                      CellSyncBurstCode,
   cellSyncBurstCodeShift
                                      CellSyncBurstCodeShift,
   synchronisationReportType
                                      SynchronisationReportType,
                                                               OPTIONAL,
   synchronisationReportCharacteristics
                                      SynchronisationReportCharacteristics,
   iE-Extensions
                                      ProtocolExtensionContainer { { CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs} }
                                                                                                                          OPTIONAL,
CellSyncBurstMeasureInit-CellSyncInitiationRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
  CELL SYNCHRONISATION INITIATION RESPONSE TDD
  ******************
CellSynchronisationInitiationResponseTDD ::= SEQUENCE
   protocolIEs
                        ProtocolIE-Container
                                             {{CellSynchronisationInitiationResponseTDD-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{CellSynchronisationInitiationResponseTDD-Extensions}}
                                                                                                      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}},
   protocolExtensions
                        ProtocolExtensionContainer {{CellSynchronisationInitiationFailureTDD-Extensions}}
                                                                                                     OPTIONAL,
```

```
CellSynchronisationInitiationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationInitiationFailureTDD-IES NBAP-PROTOCOL-IES ::= {
           id-Cause
                                               CRITICALITY
                                                              ignore
                                                                          TYPE
                                                                                  Cause
                                                                                                                             PRESENCE mandatory
           id-CriticalityDiagnostics
    { ID
                                               CRITICALITY
                                                                          TYPE
                                                                                  CriticalityDiagnostics
                                                                                                                    PRESENCE optional },
                                                              ignore
  CELL SYNCHRONISATION RECONFIGURATION REQUEST TDD
  CellSynchronisationReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                           ProtocolIE-Container
                                                   {{CellSynchronisationReconfigurationRequestTDD-IEs}},
   protocolExtensions
                           ProtocolExtensionContainer {{CellSynchronisationReconfigurationRequestTDD-Extensions}}
                                                                                                                     OPTIONAL,
CellSynchronisationReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
     ID
           id-C-ID
                                           CRITICALITY
                                                          reject
                                                                      TYPE
                                                                              C-ID
                                                                                                                         PRESENCE
                                                                                                                                     mandatory
     ID
           id-TimeSlot
                                           CRITICALITY
                                                          reject
                                                                      TYPE
                                                                              TimeSlot
                                                                                                                       PRESENCE
                                                                                                                                  mandatory
                                                                                                                       PRESENCE
     ID
           id-NCyclesPerSFNperiod
                                           CRITICALITY
                                                          reject
                                                                      TYPE
                                                                              NCyclesPerSFNperiod
                                                                                                                                  mandatory
     ID
           id-NRepetitionsPerCyclePeriod CRITICALITY
                                                          reject
                                                                      TYPE
                                                                              NRepetitionsPerCyclePeriod PRESENCE
                                                                                                                   mandatory
     ID
           id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD
                                                                      CRITICALITY
                                                                                      reiect
                                                                                                                 TYPE
    CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD
                                                          PRESENCE
                                                                      optional
           id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD
                                                                          CRITICALITY
                                                                                                                    TYPE
                                                                                          reject
   CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD
                                                              PRESENCE
                                                                          optional
    . . .
CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstTransInfoItem-
CellSyncReconfRqstTDD
CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
    cSBTransmissionID
                                               CSBTransmissionID,
    syncFrameNumberToTransmit
                                               SyncFrameNumber,
    cellSyncBurstCode
                                               CellSyncBurstCode
                                                                          OPTIONAL,
    cellSyncBurstCodeShift
                                               CellSyncBurstCodeShift
                                                                          OPTIONAL,
   dlTransPower
                                               DL-Power
                                                                          OPTIONAL,
   iE-Extensions
                                               ProtocolExtensionContainer { CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs} }
   OPTIONAL,
```

```
CellSyncBurstTransInfoItem-CellSyncReconfRgstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container {{ CellSyncBurstMeasInfo-CellSyncReconfRqstTDD }}
CellSyncBurstMeasInfo-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD CRITICALITY reject TYPE CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD PRESENCE
    mandatory } |
    { ID id-SynchronisationReportType
                                                        CRITICALITY reject TYPE SynchronisationReportType
                                                                                                                                      PRESENCE
    optional }|
    { ID id-SynchronisationReportCharacteristics
                                                                                                                             PRESENCE optional },
                                                        CRITICALITY reject TYPE SynchronisationReportCharacteristics
CellSyncBurstMeasInfoList-CellSyncReconfRgstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReconfRgstTDD
CellSyncBurstMeasInfoItem-CellSyncReconfRgstTDD ::= SEQUENCE {
    syncFrameNrToReceive
                                            SyncFrameNumber,
    syncBurstInfo
                                            CellSyncBurstInfoList-CellSyncReconfRqstTDD,
    . . .
CellSyncBurstInfoList-CellSyncReconfRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfoItem-CellSyncReconfRgstTDD
CellSyncBurstInfoItem-CellSyncReconfRgstTDD ::= SEQUENCE {
    cSBMeasurementID
                                                CSBMeasurementID,
    cellSyncBurstCode
                                                CellSyncBurstCode,
    cellSyncBurstCodeShift
                                                CellSyncBurstCodeShift,
    iE-Extensions
                                                ProtocolExtensionContainer { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs} }
                                                                                                                                         OPTIONAL,
CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- CELL SYNCHRONISATION RECONFIGURATION RESPONSE TDD
CellSynchronisationReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs
                           ProtocolIE-Container
                                                    {{CellSynchronisationReconfigurationResponseTDD-IEs}},
                            ProtocolExtensionContainer {{CellSynchronisationReconfigurationResponseTDD-Extensions}}
   protocolExtensions
                                                                                                                          OPTIONAL,
    . . .
CellSynchronisationReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

```
CellSynchronisationReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::=
          id-CriticalityDiagnostics
                                                                                    CriticalityDiagnostics
                                                                                                              PRESENCE optional },
                                                   CRITICALITY
                                                                 ignore
                                                                            TYPE
  CELL SYNCHRONISATION RECONFIGURATION FAILURE TDD
  ******************
CellSynchronisationReconfigurationFailureTDD ::= SEQUENCE
   protocolIEs
                         ProtocolIE-Container
                                                   {{CellSynchronisationReconfigurationFailureTDD-IEs}},
                                                  {{CellSynchronisationReconfigurationFailureTDD-Extensions}}
   protocolExtensions
                         ProtocolExtensionContainer
                                                                                                             OPTIONAL,
CellSynchronisationReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReconfigurationFailureTDD-IES NBAP-PROTOCOL-IES ::= {
     ID
          id-Cause
                                           CRITICALITY
                                                                                                                    PRESENCE mandatory
                                                          ignore
                                                                     TYPE
                                                                             Cause
    { ID
          id-CriticalityDiagnostics
                                           CRITICALITY
                                                          ignore
                                                                     TYPE
                                                                            CriticalityDiagnostics
                                                                                                            PRESENCE optional },
    CELL SYNCHRONISATION ADJUSTMENT REQUEST TDD
  ******************
CellSynchronisationAdjustmentRequestTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                   {{CellSynchronisationAdjustmentRequestTDD-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer
                                                  {{CellSynchronisationAdjustmentRequestTDD-Extensions}}
                                                                                                         OPTIONAL,
   . . .
CellSynchronisationAdjustmentRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationAdjustmentRequestTDD-IES NBAP-PROTOCOL-IES ::= {
          id-CellAdjustmentInfo-SyncAdjustmntRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfo-SyncAdjustmentRqstTDD PRESENCE mandatory },
   . . .
```

```
CellAdjustmentInfo-SyncAdjustmentRqstTDD::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellAdjustmentInfoItemIE-
SyncAdjustmntRgstTDD }}
CellAdjustmentInfoItemIE-SyncAdjustmntRgstTDD NBAP-PROTOCOL-IES ::= {
   { ID id-CellAdjustmentInfoItem-SyncAdjustmentRgstTDD
                                                                                                             CellAdjustmentInfoItem-
                                                          CRITICALITY
                                                                         ignore
                                                                                        TYPE
SyncAdjustmentRqstTDD
                         PRESENCE
                                    mandatory }
CellAdjustmentInfoItem-SyncAdjustmentRqstTDD ::= SEQUENCE {
                                        C-ID,
   frameAdjustmentValue
                                        FrameAdjustmentValue
                                                                  OPTIONAL,
   timingAdjustmentValue
                                        TimingAdjustmentValue
                                                                  OPTIONAL,
   dLTransPower
                                        DL-Power
                                                                  OPTIONAL,
   sfn
                                        SFN
                                                                  OPTIONAL,
                                        ProtocolExtensionContainer { { CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::=
       ****************
  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
                                                           ignore
                                                                      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-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
                                                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,
                                                ProtocolExtensionContainer { { CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                            OPTIONAL,
    . . .
CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs))
                                                                                                                    OF ProtocolIE-Single-Container {{
Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD }}
Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD NBAP-PROTOCOL-IES ::= {
           id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD
                                                                                     CRITICALITY
                                                                                                                                TYPE Unsuccessful-
                                                                                                                     ignore
cell-InformationRespItem-SyncAdjustmntFailureTDD
                                                        PRESENCE
                                                                    mandatory \}.
Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD::= SEOUENCE {
    c-ID
                                                C-ID,
    cause
                                                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-C-ID
                                       CRITICALITY
                                                      ignore
                                                                TYPE
                                                                        C-ID
                                                                                                                PRESENCE mandatory
     ID
          id-CSBTransmissionID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        CSBTransmissionID
                                                                                                                PRESENCE optional
          id-CSBMeasurementID
    ID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        CSBMeasurementID
                                                                                                                PRESENCE optional
    -- CELL SYNCHRONISATION FAILURE INDICATION TDD
  *******************
CellSynchronisationFailureIndicationTDD ::= SEQUENCE
                                               {{CellSynchronisationFailureIndicationTDD-IEs}},
   protocolIEs
                         ProtocolIE-Container
                         ProtocolExtensionContainer {{CellSynchronisationFailureIndicationTDD-Extensions}}
   protocolExtensions
                                                                                                       OPTIONAL,
   . . .
CellSynchronisationFailureIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationFailureIndicationTDD-IES NBAP-PROTOCOL-IES ::= {
     ID
          id-C-ID
                                                                TYPE
                                                                        C-ID
                                       CRITICALITY
                                                      ignore
                                                                                                                PRESENCE mandatory
          id-CSBTransmissionID
                                                                        CSBTransmissionID
     ID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                                                                PRESENCE optional
     ID
          id-CSBMeasurementID
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        CSBMeasurementID
                                                                                                                PRESENCE optional
    ID
          id-Cause
                                       CRITICALITY
                                                      ignore
                                                                 TYPE
                                                                        Cause
                                                                                                                PRESENCE mandatory
   . . .
```

```
*****************
-- CELL SYNCHRONISATION REPORT TDD
__ *********************
CellSynchronisationReportTDD ::= SEOUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{CellSynchronisationReportTDD-IEs}},
                          ProtocolExtensionContainer {{CellSynchronisationReportTDD-Extensions}}
   protocolExtensions
                                                                                                   OPTIONAL,
CellSynchronisationReportTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
CellSynchronisationReportTDD-IEs NBAP-PROTOCOL-IES ::= {
           id-CellSyncInfo-CellSyncReprtTDD
                                                 CRITICALITY ignore
                                                                        TYPE
                                                                                CellSyncInfo-CellSyncReprtTDD
                                                                                                                    PRESENCE mandatory
    . . .
CellSyncInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ CellSyncInfoItemIE-CellSyncReprtTDD }}
CellSyncInfoItemIE-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
          id-C-ID
    { ID
                                                         CRITICALITY ignore TYPE C-ID
   PRESENCE
               mandatory}|
           id-SyncReportType-CellSyncReprtTDD
    { ID
                                                 CRITICALITY ignore
                                                                        TYPE SyncReportType-CellSyncReprtTDD
                                                                                                                 PRESENCE optional },
SyncReportType-CellSyncReprtTDD ::= CHOICE {
   intStdPhSyncInfoItem-CellSyncReprtTDD
                                             IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
   lateEntrantCell
                              NULL.
   frequencyAcquisition
                              NULL,
IntStdPhCellSyncInfoItem-CellSyncReprtTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReprtTDD
CellSyncBurstMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
   cellSyncBurstInfo-CellSyncReprtTDD
                                          SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
    . . .
CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
    cellSyncBurstAvailable
                              CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstNotAvailable
```

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
   maxNrOfTFCs,
   maxNrOfErrors,
   maxCTFC,
   maxNrOfTFs,
   maxTTI-count,
   maxRateMatching,
   maxCodeNrComp-1,
   maxNrOfCellSyncBursts,
   maxNrOfCodeGroups,
   maxNrOfMeasNCell,
   maxNrOfMeasNCell-1,
   maxNrOfReceptsPerSyncFrame,
   maxNrOfTFCIGroups,
   maxNrOfTFCI1Combs,
   maxNrOfTFCI2Combs,
   maxNrOfTFCI2Combs-1,
   maxNrOfSF,
   maxTGPS,
   maxNrOfUSCHs,
   maxNrOfULTSs,
   maxNrOfULTSLCRs,
   maxNrOfDPCHs,
   maxNrOfDPCHLCRs,
   maxNrOfCodes,
   maxNrOfDSCHs,
   maxNrOfDLTSs,
   maxNrOfDLTSLCRs,
```

```
maxNrOfDCHs,
   maxNrOfLevels,
   maxNoGPSItems.
   maxNoSat,
   id-MessageStructure,
   id-TypeOfError
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;
-- -----
-- -----
Acknowledged-PCPCH-access-preambles ::= INTEGER (0..15,...)
Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)
-- The number of L1 acknowledged random access tries per every 20 ms period.
AddorDeleteIndicator ::= ENUMERATED {
   add,
   delete
Active-Pattern-Sequence-Information ::= SEQUENCE {
   cMConfigurationChangeCFN
                                                        CFN,
    transmission-Gap-Pattern-Sequence-Status
                                             Transmission-Gap-Pattern-Sequence-Status-List OPTIONAL,
                                             ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
   SEQUENCE {
```

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```
tGPSID
                       TGPSID.
       tGPRC
                       TGPRC,
       tGCFN
                       CFN,
       iE-Extensions
                           ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
AICH-Power ::= INTEGER (-22..5)
-- Offset in dB.
AICH-TransmissionTiming ::= ENUMERATED {
   ν0,
   v1
AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel
                               PriorityLevel,
   pre-emptionCapability
                               Pre-emptionCapability,
   pre-emptionVulnerability
                               Pre-emptionVulnerability,
   iE-Extensions
                               ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    . . .
AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
APPreambleSignature ::= INTEGER (0..15)
APSubChannelNumber ::= INTEGER (0..11)
AvailabilityStatus ::= ENUMERATED {
    empty,
    in-test,
    failed,
   power-off,
    off-line,
    off-duty,
    dependency,
    degraded,
   not-installed,
   log-full,
-- -----
```

```
BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed
BindingID ::= OCTET STRING (SIZE (1..4, ...))
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.
BlockSTTD-Indicator ::= ENUMERATED {
   active,
   inactive
-- -----
-- -----
Cause ::= CHOICE {
   radioNetwork
                         CauseRadioNetwork,
                     CauseTransport,
   transport
   protocol
                         CauseProtocol,
   misc
                         CauseMisc,
CauseMisc ::= ENUMERATED {
   control-processing-overload,
   hardware-failure,
   oam-intervention,
   not-enough-user-plane-processing-resources,
   unspecified,
CauseProtocol ::= ENUMERATED {
   transfer-syntax-error,
   abstract-syntax-error-reject,
   abstract-syntax-error-ignore-and-notify,
   message-not-compatible-with-receiver-state,
```

```
semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available.
    power-level-not-supported,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available.
    rl-already-ActivatedOrAlocated,
    nodeB-Resources-unavailable,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    requested-configuration-not-supported,
    synchronisation-failure,
    priority-transport-channel-established,
    sIB-Origination-in-Node-B-not-Supported,
    requested-tx-diversity-mode-not-supported,
    unspecified,
    bCCH-scheduling-error,
    measurement-temporarily-not-available,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    s-cipch-not-supported,
    combining-not-supported,
    ul-sf-not-supported,
    dl-SF-not-supported,
    common-transport-channel-type-not-supported,
    dedicated-transport-channel-type-not-supported,
    downlink-shared-channel-type-not-supported,
    uplink-shared-channel-type-not-supported,
    cm-not-supported,
    tx-diversity-no-longer-supported,
    unknown-Local-Cell-ID,
    number-of-UL-codes-not-supported,
    information-temporarily-not-available,
    information-provision-not-supported-for-the-object,
    cell-synchronisation-not-supported,
    synchronisation-adjustment-not-supported,
    dpc-mode-change-not-supported,
    iPDL-already-activated,
    iPDL-not-supported,
    iPDL-parameters-not-available,
    frequency-acquisition-not-supported
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
```

```
unspecified,
CCTrCH-ID ::= INTEGER (0..15)
CDSubChannelNumbers ::= BIT STRING {
                                        subCh11(0),
                                        subCh10(1),
                                        subCh9(2),
                                        subCh8(3),
                                        subCh7(4),
                                        subCh6(5),
                                        subCh5(6),
                                        subCh4(7),
                                        subCh3(8),
                                        subCh2(9),
                                        subCh1(10),
                                        subCh0(11)
                                        } (SIZE (12))
CellParameterID ::= INTEGER (0..127,...)
CellSyncBurstAvailabilityIndicator ::= ENUMERATED {
    cellSyncBurstAvailable,
    cellSyncBurstNotAvailable
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)
CellSyncBurstTimingThreshold ::= INTEGER(0..254)
CFN ::= INTEGER (0..255)
Channel-Assignment-Indication ::= ENUMERATED {
    cA-Active,
    cA-Inactive
ChipOffset ::= INTEGER (0..38399)
-- Unit Chip
```

```
C-ID ::= INTEGER (0..65535)
Closedlooptimingadjustmentmode ::= ENUMERATED {
   adj-1-slot,
   adj-2-slot,
CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
   SEQUENCE {
       dl-Cost
                   INTEGER (0..65535),
       ul-Cost
                   INTEGER (0..65535),
                          iE-Extensions
                                                                                                                 OPTIONAL,
    . . .
CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementAccuracy ::= CHOICE
    tUTRANGPSMeasurementAccuracyClass
                                          TUTRANGPSAccuracyClass,
CommonMeasurementType ::= ENUMERATED {
   received-total-wide-band-power,
    transmitted-carrier-power,
   acknowledged-prach-preambles,
   ul-timeslot-iscp,
    acknowledged-PCPCH-access-preambles,
   detected-PCPCH-access-preambles,
   uTRAN-GPS-Timing-of-Cell-Frames-for-LCS,
    sFN-SFN-Observed-Time-Difference
CommonMeasurementValue ::= CHOICE {
   transmitted-carrier-power
                                          Transmitted-Carrier-Power-Value,
   received-total-wide-band-power
                                          Received-total-wide-band-power-Value,
                                          Acknowledged-PRACH-preambles-Value,
   acknowledged-prach-preambles
   uL-TimeslotISCP
                                          UL-TimeslotISCP-Value,
    acknowledged-PCPCH-access-preambles
                                          Acknowledged-PCPCH-access-preambles,
   detected-PCPCH-access-preambles
                                          Detected-PCPCH-access-preambles,
    tUTRANGPSMeasurementValueInformation
                                          TUTRANGPSMeasurementValueInformation.
    sFNSFNMeasurementValueInformation
                                          SFNSFNMeasurementValueInformation
CommonMeasurementValueInformation ::= CHOICE {
   measurementAvailable
                              CommonMeasurementAvailable,
   measurementnotAvailable
                              CommonMeasurementnotAvailable
```

```
CommonMeasurementAvailable::= SEQUENCE {
    commonmeasurementValue
                                CommonMeasurementValue,
                                    ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }
    ie-Extensions
                                                                                                                       OPTIONAL,
CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonMeasurementnotAvailable ::= NULL
CommonPhysicalChannelID ::= INTEGER (0..255)
Common-PhysicalChannel-Status-Information ::= SEOUENCE {
    commonPhysicalChannelID
                                    CommonPhysicalChannelID,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
    iE-Extensions
                                        ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs} }
                                                                                                                                OPTIONAL,
Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommonTransportChannelID ::= INTEGER (0..255)
Common-TransportChannel-Status-Information ::= SEQUENCE {
    commonTransportChannelID
                                        CommonTransportChannelID,
    resourceOperationalState
                                        ResourceOperationalState,
    availabilityStatus
                                        AvailabilityStatus,
    iE-Extensions
                                        ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs} }
Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CommunicationControlPortID ::= INTEGER (0..65535)
Compressed-Mode-Deactivation-Flag::= ENUMERATED {
    deactivate,
    maintain-Active
-- on=deactivate
```

```
ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"
ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB
CPCH-Allowed-Total-Rate ::= ENUMERATED {
   v15,
   v30,
    v60,
   v120,
    v240,
    v480,
    v960,
    v1920,
   v2880,
   v3840,
   v4800,
   v5760,
CPCHScramblingCodeNumber ::= INTEGER (0..79)
CPCH-UL-DPCCH-SlotFormat ::= INTEGER (0..2,...)
CriticalityDiagnostics ::= SEQUENCE {
   procedureID
                              ProcedureID
                                                     OPTIONAL,
    triggeringMessage
                              TriggeringMessage
                                                         OPTIONAL,
   procedureCriticality
                              Criticality
                                                     OPTIONAL,
    transactionID
                              TransactionID
                                                         OPTIONAL,
    iE-Extensions
                              ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }
                                                                                                              OPTIONAL.
CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
       iECriticality
                          Criticality,
       iE-ID
                          ProtocolIE-ID,
       repetitionNumber
                          RepetitionNumber0
                                                 OPTIONAL,
       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
    . . .
MessageStructure ::= SEOUENCE (SIZE (1..maxNrOfLevels)) OF
   SEQUENCE {
       iE-ID
                               ProtocolIE-ID,
       repetitionNumber
                              RepetitionNumber1
                                                      OPTIONAL.
                               ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
       iE-Extensions
MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
CRNC-CommunicationContextID ::= INTEGER (0..1048575)
CSBMeasurementID ::= INTEGER (0..65535)
CSBTransmissionID ::= INTEGER (0..65535)
__ ______
__ ------
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,
   t.oAWE
                                      TOAWE,
   dCH-SpecificInformationList
                                      DCH-Specific-FDD-InformationList,
   iE-Extensions
                                      ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs} }
                                                                                                                OPTIONAL,
    . . .
DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item
DCH-Specific-FDD-Item ::= SEQUENCE {
   dCH-ID
                                      DCH-ID,
   ul-TransportFormatSet
                                      TransportFormatSet,
   dl-TransportFormatSet
                                      TransportFormatSet,
   allocationRetentionPriority
                                      AllocationRetentionPriority,
```

```
frameHandlingPriority
                                     FrameHandlingPriority,
   qE-Selector
                                     OE-Selector,
   iE-Extensions
                                     ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs} }
                                                                                                            OPTIONAL.
DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
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 ::= {
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,
   iE-Extensions
                                         ProtocolExtensionContainer { { DCH-TDD-InformationItem-ExtIEs} } 
                                                                                                              OPTIONAL,
DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item
DCH-Specific-TDD-Item ::= SEQUENCE {
   dCH-ID
                                         DCH-ID,
   ul-CCTrCH-ID
                                         CCTrCH-ID.
   dl-CCTrCH-ID
                                         CCTrCH-ID,
   ul-TransportFormatSet
                                         TransportFormatSet,
   dl-TransportFormatSet
                                         TransportFormatSet,
   allocationRetentionPriority
                                         AllocationRetentionPriority,
   frameHandlingPriority
                                         FrameHandlingPriority,
   qE-Selector
                                         OE-Selector
                                                                       OPTIONAL,
   -- This IE shall be present if DCH is part of set of Coordinated DCHs
   iE-Extensions
                                         OPTIONAL,
```

```
DCH-Specific-TDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
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,
                                                      OPTIONAL,
    toAWE
                                      TOAWE
    transportBearerRequestIndicator
                                      TransportBearerRequestIndicator,
   dCH-SpecificInformationList
                                      DCH-ModifySpecificInformation-FDD,
   iE-Extensions
                                      ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-ExtIEs} } 
                                                                                                                   OPTIONAL,
    . . .
FDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DCH-ModifySpecificInformation-FDD::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD
DCH-ModifySpecificItem-FDD::=
   dCH-ID
                                                  DCH-ID,
   ul-TransportFormatSet
                                                  TransportFormatSet
                                                                             OPTIONAL,
   dl-TransportFormatSet
                                                  TransportFormatSet
                                                                             OPTIONAL,
    allocationRetentionPriority
                                                  AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                                  FrameHandlingPriority
                                                                             OPTIONAL,
   iE-Extensions
                                                  OPTIONAL,
    . . .
DCH-ModifySpecificItem-FDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD
DCH-ModifyItem-TDD ::= SEQUENCE {
   ul-FP-Mode
                                      UL-FP-Mode
                                                      OPTIONAL,
   toAWS
                                      ToAWS
                                                      OPTIONAL,
   toAWE
                                      TOAWE
                                                      OPTIONAL,
    transportBearerRequestIndicator
                                      TransportBearerRequestIndicator,
   dCH-SpecificInformationList
                                      DCH-ModifySpecificInformation-TDD,
   iE-Extensions
                                      ProtocolExtensionContainer { TDD-DCHs-to-ModifyItem-ExtIEs} }
                                                                                                                     OPTIONAL,
    . . .
TDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD
DCH-ModifySpecificItem-TDD ::= SEQUENCE {
   dCH-ID
                                                  DCH-ID,
   ul-CCTrCH-ID
                                                  CCTrCH-ID
                                                                             OPTIONAL,
   dl-CCTrCH-ID
                                                  CCTrCH-ID
                                                                             OPTIONAL,
   ul-TransportFormatSet
                                                  TransportFormatSet
                                                                             OPTIONAL,
   dl-TransportFormatSet
                                                  TransportFormatSet
                                                                             OPTIONAL,
   allocationRetentionPriority
                                                  AllocationRetentionPriority OPTIONAL,
   frameHandlingPriority
                                                  FrameHandlingPriority
                                                                             OPTIONAL,
   iE-Extensions
                                                  OPTIONAL,
DCH-ModifySpecificItem-TDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
   SEQUENCE {
       dl-Cost-1
                       INTEGER (0..65535),
       dl-Cost-2
                       INTEGER (0..65535),
       ul-Cost-1
                       INTEGER (0..65535),
       ul-Cost-2
                       INTEGER (0..65535),
                           ProtocolExtensionContainer { { DedicatedChannelsCapacityConsumptionLaw-ExtIEs } }
       iE-Extensions
                                                                                                                  OPTIONAL,
    . . .
DedicatedChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementType ::= ENUMERATED {
   sir,
   sir-error,
   transmitted-code-power,
   rscp,
   rx-timing-deviation,
   round-trip-time,
DedicatedMeasurementValue ::= CHOICE {
   sIR-Value
                                   SIR-Value,
   sIR-ErrorValue
                                   SIR-Error-Value,
    transmittedCodePowerValue
                                      Transmitted-Code-Power-Value,
   rSCP
                                      RSCP-Value,
   rxTimingDeviationValue
                                      Rx-Timing-Deviation-Value,
   roundTripTime
                                      Round-Trip-Time-Value,
```

```
DedicatedMeasurementValueInformation ::= CHOICE {
   measurementAvailable
                             DedicatedMeasurementAvailable,
                             DedicatedMeasurementnotAvailable
   measurementnotAvailable
DedicatedMeasurementAvailable::= SEQUENCE {
   dedicatedmeasurementValue
                                DedicatedMeasurementValue,
   CFN
                                                          OPTIONAL,
   ie-Extensions
                                ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }
                                                                                                           OPTIONAL,
DedicatedMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
DedicatedMeasurementnotAvailable ::= NULL
Detected-PCPCH-access-preambles ::= INTEGER (0..240,...)
DeltaSIR
                     ::= INTEGER (0..30)
-- Unit dB, Step 0.1 dB, Range 0...3 dB.
DGPSCorrections ::= SEQUENCE {
  gpstow
                      GPSTOW,
  status-health
                      GPS-Status-Health,
  satelliteinfo
                      SAT-Info-DGPSCorrections,
  ie-Extensions
                      OPTIONAL,
DGPSCorrections-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
DGPSThresholds ::= SEQUENCE {
                     PRCDeviation,
  prcdeviation
  ie-Extensions
                     OPTIONAL,
DGPSThresholds-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DiversityControlField ::= ENUMERATED {
    may,
    must,
    must-not,
DiversityMode ::= ENUMERATED {
    none,
    sTTD,
    closed-loop-model,
    closed-loop-mode2,
DL-DPCH-SlotFormat ::= INTEGER (0..16,...)
DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem
DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-Information
                                            TDD-DL-Code-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { DL-Timeslot-InformationItem-ExtIEs} }
                                                                                                                       OPTIONAL,
DL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-TimeslotLCR-InformationItem
DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-LCR-Information
                                            TDD-DL-Code-LCR-Information,
                                            ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs} }
    iE-Extensions
DL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
```

OPTIONAL,

OPTIONAL.

```
DL-or-Global-CapacityCredit ::= INTEGER (0..65535)
DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <=-35 DL-Power shall be set to -350
-- if Power >=15 DL-Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB
DLPowerAveragingWindowSize ::= INTEGER (1..60)
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
    . . .
DL-TimeslotISCPInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotISCPInfoLCR ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-TimeslotISCPInfoItemLCR
DL-TimeslotISCPInfoItemLCR ::= SEQUENCE {
    timeSlotLCR
                               TimeSlotLCR,
    dL-TimeslotISCP
                               DL-TimeslotISCP.
                               ProtocolExtensionContainer { {DL-TimeslotISCPInfoItemLCR-ExtIEs} }
    iE-Extensions
DL-TimeslotISCPInfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DL-TPC-Pattern01Count ::= INTEGER (0..30,...)
Downlink-Compressed-Mode-Method
                                   ::= ENUMERATED {
    puncturing,
    sFdiv2.
    higher-layer-scheduling,
```

```
DPC-Mode ::= ENUMERATED {
                                                                                                    mode0.
                                                                                                    mode1,
DPCH-ID ::= INTEGER (0..239)
DSCH-ID ::= INTEGER (0..255)
DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem
DSCH-InformationResponseItem ::= SEQUENCE {
   dscH-ID
                                             DSCH-ID,
   bindingID
                                             BindingID
                                                                     OPTIONAL,
   transportLayerAddress
                                             TransportLayerAddress
                                                                     OPTIONAL,
   iE-Extensions
                                             OPTIONAL,
   . . .
DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-FDD-Common-Information ::= SEQUENCE {
   enhancedDSCHPCIndicator
                               EnhancedDSCHPCIndicator
                                                       OPTIONAL,
   enhancedDSCHPC
                               EnhancedDSCHPC
                                                       OPTIONAL,
   -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC Active in the UE".
                                  iE-Extensions
                                                                                                       OPTIONAL,
   . . .
DSCH-FDD-Common-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DSCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-FDD-InformationItem
DSCH-FDD-InformationItem ::= SEQUENCE {
   dSCH-ID
                                  DSCH-ID,
   transportFormatSet
                                  TransportFormatSet,
   allocationRetentionPriority
                                  AllocationRetentionPriority,
   frameHandlingPriority
                                  FrameHandlingPriority,
   toAWS
                                  ToAWS,
   toAWE
                                  TOAWE,
   iE-Extensions
                                  OPTIONAL,
DSCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem
DSCH-TDD-InformationItem ::= SEQUENCE {
   dscH-ID
                                      DSCH-ID.
   cCTrCH-ID
                                      CCTrCH-ID,
   transportFormatSet
                                      TransportFormatSet,
   allocationRetentionPriority
                                      AllocationRetentionPriority,
   frameHandlingPriority
                                      FrameHandlingPriority,
   toAWS
                                      ToAWS,
                                      ToAWE,
   toAWE
                                      ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                        OPTIONAL,
DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
DwPCH-Power ::= ENUMERATED {minus1, minus9, minus8, minus7, minus6, minus4, minus3, minus2, minus1, zero, plus1, plus2, plus3, plus4,
plus5, ...}
-- -----
End-Of-Audit-Sequence-Indicator ::= ENUMERATED {
   end-of-audit-sequence,
   not-end-of-audit-sequence
EnhancedDSCHPC ::= SEQUENCE {
   enhancedDSCHPCWnd EnhancedDSCHPCWnd,
   enhancedDSCHPCCounter EnhancedDSCHPCCounter,
   enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
   . . .
EnhancedDSCHPCCounter ::= INTEGER (1..50)
EnhancedDSCHPCIndicator ::= ENUMERATED {
   enhancedDSCHPCActiveInTheUE,
   enhancedDSCHPCNotActiveInTheUE
EnhancedDSCHPCWnd ::= INTEGER (1..10)
EnhancedDSCHPowerOffset ::= INTEGER (-15..0)
-- -----
```

```
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,
                                          ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                OPTIONAL,
FDD-DL-CodeInformationItem-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
FDD-S-CCPCH-Offset ::= INTEGER (0..149)
-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --
FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS,
FNReportingIndicator ::= ENUMERATED {
fN-reporting-required,
fN-reporting-not-required
FrameHandlingPriority ::= INTEGER (0..15)
-- 0=lower priority, 15=higher priority --
FrameAdjustmentValue ::= INTEGER(0..4095)
FrameOffset ::= INTEGER (0..255)
FPACH-Power ::= ENUMERATED {minus1, minus9, minus8, minus7, minus6, minus4, minus3, minus2, minus1, zero, plus1, plus2, plus3, plus4,
plus5, ...}
```

```
-- -----
GapLength
                       ::= INTEGER (1..14)
-- Unit slot
GapDuration
                       ::= INTEGER (1..144,...)
-- Unit frame
GPS-Almanac ::= SEOUENCE {
                        BIT STRING (SIZE (8)),
    wn<sub>a</sub>-alm
   sat-info-almanac
                        SAT-Info-Almanac,
   ie-Extensions
                        ProtocolExtensionContainer { GPS-Almanac-ExtIEs} }
                                                                                  OPTIONAL,
GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-Ionospheric-Model ::= SEQUENCE {
  alpha-zero-ionos
                        BIT STRING (SIZE (8)),
  alpha-one-ionos
                        BIT STRING (SIZE (8)),
  alpha-two-ionos
                        BIT STRING (SIZE (8)),
  alpha-three-ionos
                        BIT STRING (SIZE (8)),
  beta-zero-ionos
                        BIT STRING (SIZE (8)),
  beta-one-ionos
                        BIT STRING (SIZE (8)),
  beta-two-ionos
                        BIT STRING (SIZE (8)),
  beta-three-ionos
                        BIT STRING (SIZE (8)),
                        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,
  gps-ionospheric-model,
  gps-utc-model,
  gps-almanac,
  gps-rt-integrity,
```

```
GPS-RealTime-Integrity ::= CHOICE {
    bad-satellites
                               GPSBadSat-Info-RealTime-Integrity,
    no-bad-satellites
                               NULL
GPSBadSat-Info-RealTime-Integrity ::= SEQUENCE {
    sat-info
                                   SATInfo-RealTime-Integrity,
    ie-Extensions
                                   OPTIONAL,
GPSBadSat-Info-RealTime-Integrity-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
GPS-NavigationModel-and-TimeRecovery ::= SEOUENCE (SIZE (1..maxNoSat)) OF GPS-NavandRecovery-Item
GPS-NavandRecovery-Item ::= SEQUENCE {
  tx-tow-nav
                                  INTEGER (0..1048575),
  sat-id-nav
                                  SAT-ID,
  tlm-message-nav
                                 BIT STRING (SIZE (14)),
  tlm-revd-c-nav
                                 BIT STRING (SIZE (2)),
 ho-word-nav
                                 BIT STRING (SIZE (22)),
 w-n-nav
                                 BIT STRING (SIZE (10)),
 ca-or-p-on-12-nav
                                 BIT STRING (SIZE (2)),
 user-range-accuracy-index-nav
                                 BIT STRING (SIZE (4)),
  sv-health-nav
                                  BIT STRING (SIZE (6)),
 iodc-nav
                                  BIT STRING (SIZE (10)),
 12-p-dataflag-nav
                                 BIT STRING (SIZE (1)),
  sfl-reserved-nav
                                 BIT STRING (SIZE (87)),
  t-gd-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)),
                                 BIT STRING (SIZE (16)),
 c-us-nav
  a-sqrt-nav
                                 BIT STRING (SIZE (32)),
  t-oe-nav
                                 BIT STRING (SIZE (16)),
  fit-interval-flag-nav
                                 BIT STRING (SIZE (1)),
  aodo-nav
                                 BIT STRING (SIZE (5)),
  c-ic-nav
                                 BIT STRING (SIZE (16)),
  omega-zero-nav
                                 BIT STRING (SIZE (32)),
```

OPTIONAL,

```
c-is-nav
                                   BIT STRING (SIZE (16)),
 i-zero-nav
                                  BIT STRING (SIZE (32)),
  c-rc-nav
                                  BIT STRING (SIZE (16)),
  gps-omega-nav
                                  BIT STRING (SIZE (32)),
  omegadot-nav
                                  BIT STRING (SIZE (24)),
  idot-nav
                                  BIT STRING (SIZE (14)),
  spare-zero-fill
                                  BIT STRING (SIZE (20)),
  ie-Extensions
                                  ProtocolExtensionContainer { { GPS-NavandRecovery-Item-ExtIEs} }
GPS-NavandRecovery-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-RX-POS ::= SEQUENCE {
    latitudeSign
                            ENUMERATED {north, south},
    latitude
                            INTEGER (0..8388607),
    longitude
                            INTEGER (-8388608..8388607),
                            ProtocolExtensionContainer { GPS-RX-POS-ExtIEs} } OPTIONAL,
    iE-Extensions
GPS-RX-POS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
GPS-Status-Health ::= ENUMERATED {
  udre-scale-1dot0,
  udre-scale-0dot75,
  udre-scale-0dot5,
  udre-scale-0dot3,
  udre-scale-0dot1,
  no-data,
   invalid-data
GPSTOW ::= INTEGER (0..604799)
GPS-UTC-Model ::= SEQUENCE {
  a-one-utc
                        BIT STRING (SIZE (24)),
  a-zero-utc
                        BIT STRING (SIZE (32)),
  t-ot-utc
                        BIT STRING (SIZE (8)),
  delta-t-ls-utc
                        BIT STRING (SIZE (8)),
  w-n-t-utc
                        BIT STRING (SIZE (8)),
  w-n-lsf-utc
                        BIT STRING (SIZE (8)),
  dn-utc
                        BIT STRING (SIZE (8)),
  delta-t-lsf-utc
                    BIT STRING (SIZE (8)),
```

```
ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs} }
  ie-Extensions
                                                                    OPTIONAL,
GPS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
-- -----
-- ------
IB-OC-ID ::= INTEGER (1..16)
IB-SG-DATA ::= BIT STRING
-- Contains SIB data fixed" or "SIB data variable" in segment as encoded in ref.[18].
IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed
IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}
IB-Type ::= ENUMERATED {
   mIB,
   sB1,
   sB2,
   sIB1,
   sIB2,
   sIB3,
   sIB4,
   sIB5,
   sIB6,
   sIB7,
   sIB8,
   sIB9,
   sIB10,
   sIB11,
   sIB12,
   sIB13,
   sIB13dot1,
   sIB13dot2,
   sIB13dot3,
   sIB13dot4,
   sIB14,
   sIB15,
   sIB15dot1,
   sIB15dot2,
```

```
sIB15dot3,
    sIB16,
    . . . .
    sIB17,
    sIB15dot4,
    sIB18
IndicationType ::= ENUMERATED {
    noFailure,
    serviceImpacting,
    . . .
InformationReportCharacteristics ::= CHOICE {
    onDemand
    periodic
                            InformationReportCharacteristicsType-ReportPeriodicity,
                            InformationReportCharacteristicsType-OnModification,
    onModification
InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
                        ReportPeriodicity-Scaledmin,
    hours
                        ReportPeriodicity-Scaledhour,
InformationReportCharacteristicsType-OnModification ::= SEQUENCE {
    information-thresholds
                                  InformationThresholds,
    ie-Extensions
                                   ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs} } OPTIONAL,
InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
InformationThresholds ::= CHOICE {
    dgps
                        DGPSThresholds,
    . . .
InformationExchangeID ::= INTEGER (0..1048575)
InformationType ::= SEQUENCE {
    information-Type-Item
                                 Information-Type-Item,
    gPSInformation
                                GPS-Information OPTIONAL,
    iE-Extensions
                                 ProtocolExtensionContainer { { Information-Type-ExtIEs} }
                                                                                                  OPTIONAL,
```

```
Information-Type-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
Information-Type-Item ::= ENUMERATED {
    apsinformation,
    dqpscorrections,
    gpsrxpos,
    . . .
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(1..63),
    seed
                                    BurstModeParams
    burstModeParams
                                                        OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs} }
IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
IPDL-TDD-Parameters ::= SEQUENCE {
    iP-SpacingTDD
                                     ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
   iP-Start
                                    INTEGER(0..4095),
   iP-Slot
                                    INTEGER(0..14),
    iP-PCCPCH
                                    ENUMERATED{switchOff-1-Frame,switchOff-2-Frames},
    burstModeParams
                                    BurstModeParams
                                                        OPTIONAL,
                            ProtocolExtensionContainer { { IPDLTDDParameter-ExtIEs} }
    iE-Extensions
BurstModeParams ::= SEQUENCE {
    burstStart
                                        INTEGER(0..15),
    burstLenth
                                        INTEGER(10..25),
```

```
burstFreq
                              INTEGER(1..16),
IPDLTDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
__ ______
__ ______
__ ______
-- -----
-- -----
Local-Cell-ID ::= INTEGER (0..268435455)
-- -----
-- ------
MaximumDL-PowerCapability ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB
MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range OdBm .. 50dBm, Step +0.1dB
MaxNrOfUL-DPDCHs ::= INTEGER (1..6)
Max-Number-of-PCPCHes ::= INTEGER (1..64,...)
MaxPRACH-MidambleShifts ::= ENUMERATED {
   shift4,
   shift8,
   . . .
MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement
MeasurementID ::= INTEGER (0..1048575)
MidambleConfigurationBurstType1And3 ::=
                                 ENUMERATED {v4, v8, v16}
                              ENUMERATED {v3, v6}
MidambleConfigurationBurstType2 ::=
MidambleShiftAndBurstType ::=
                           CHOICE {
                              SEQUENCE {
   type1
```

```
midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                             CHOICE {
                                                 NULL,
            default.Midamble
            commonMidamble
                                                 NULL,
                                                 MidambleShiftLong,
            ueSpecificMidamble
                                         SEQUENCE
    type2
        midambleConfigurationBurstType2
                                             MidambleConfigurationBurstType2,
        midambleAllocationMode
                                             CHOICE
            defaultMidamble
                                                 NULL.
            commonMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftShort,
                                         SEQUENCE {
    type3
        midamble Configuration Burst Type 1 And 3 Midamble Configuration Burst Type 1 And 3,
        midambleAllocationMode
                                             CHOICE {
            defaultMidamble
                                                 NULL,
            ueSpecificMidamble
                                                 MidambleShiftLong,
MidambleShiftLong ::=
                                     INTEGER (0..15)
MidambleShiftShort ::=
                                     INTEGER (0..5)
MidambleShiftLCR ::= SEQUENCE {
    midamble Allocation Mode
                                 MidambleAllocationMode,
    midambleShift
                                 MidambleShiftLong
                                 ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }
    iE-Extensions
                                                                                                   OPTIONAL,
MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
MidambleShiftLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
MinimumDL-PowerCapability ::= INTEGER(0..800)
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB
MinSpreadingFactor ::= ENUMERATED {
      v8,
      v16,
      v32,
      v64,
      v128,
      v256,
       v512
MinUL-ChannelisationCodeLength ::= ENUMERATED {
   v8,
   v16,
   v32,
   v64,
   v128,
   v256,
MultiplexingPosition ::= ENUMERATED {
   fixed,
   flexible
-- -----
NCyclesPerSFNperiod ::= ENUMERATED {
   v1,
   v2,
   v4,
   v8,
NEOT ::= INTEGER (0..8)
NFmax ::= INTEGER (1..64,...)
NRepetitionsPerCyclePeriod ::= INTEGER (2..10)
N-INSYNC-IND ::= INTEGER (1..256)
N-OUTSYNC-IND ::= INTEGER (1..256)
NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
```

```
CHOICE {
              {\tt neighbouringFDDCellMeasurementInformation}
                                                           NeighbouringFDDCellMeasurementInformation,
              neighbouringTDDCellMeasurementInformation
                                                           NeighbouringTDDCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
   uC-Id
                                    UC-Id,
   uARFCN
                                    UARFCN,
   primaryScramblingCode
                                    PrimaryScramblingCode,
   iE-Extensions
                                    ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    . . .
NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
   uC-Id
                                    UC-Id,
   uARFCN
                                    UARFCN,
   cellParameterID
                                    CellParameterID,
   timeSlot
                                    TimeSlot,
   midambleShiftAndBurstType
                                    MidambleShiftAndBurstType,
   iE-Extensions
                                    ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
NodeB-CommunicationContextID ::= INTEGER (0..1048575)
NStartMessage ::= INTEGER (1..8)
-- -----
  _____
-- -----
PagingIndicatorLength ::= ENUMERATED {
   v2,
   v4,
   v8,
```

```
PayloadCRC-PresenceIndicator ::= ENUMERATED {
    cRC-Included,
    cRC-NotIncluded.
PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
PCP-Length ::= ENUMERATED{
   νO,
    v8
PDSCH-CodeMapping ::= SEQUENCE {
    dl-ScramblingCode
                                   DL-ScramblingCode,
    signallingMethod
                                       CHOICE {
       code-Range
                                       PDSCH-CodeMapping-PDSCH-CodeMappingInformationList,
       tFCI-Range
                                       PDSCH-CodeMapping-DSCH-MappingInformationList,
       explicit
                                           PDSCH-CodeMapping-PDSCH-CodeInformationList,
        . . .
    iE-Extensions
                                           OPTIONAL,
PDSCH-CodeMapping-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
PDSCH-CodeMapping-CodeNumberComp ::= INTEGER (0..maxCodeNrComp-1)
PDSCH-CodeMapping-SpreadingFactor ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
PDSCH-CodeMapping-PDSCH-CodeMappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfCodeGroups)) OF
    SEQUENCE {
                                   PDSCH-CodeMapping-SpreadingFactor,
       spreadingFactor
       multi-CodeInfo
                                   PDSCH-Multi-CodeInfo,
       start-CodeNumber
                                       PDSCH-CodeMapping-CodeNumberComp,
        stop-CodeNumber
                                   PDSCH-CodeMapping-CodeNumberComp,
       iE-Extensions
                                       ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs} }
                                                                                                                                    OPTIONAL,
```

```
PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-CodeMapping-DSCH-MappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
    SEQUENCE {
        maxTFCI-field2-Value
                                        PDSCH-CodeMapping-MaxTFCI-Field2-Value,
                                    PDSCH-CodeMapping-SpreadingFactor,
        spreadingFactor
        multi-CodeInfo
                                    PDSCH-Multi-CodeInfo,
        codeNumber
                                    PDSCH-CodeMapping-CodeNumberComp,
       iE-Extensions
                                        ProtocolExtensionContainer { { PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs} } OPTIONAL,
PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-CodeMapping-MaxTFCI-Field2-Value ::= INTEGER (1..1023)
PDSCH-CodeMapping-PDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
    SEQUENCE .
        spreadingFactor
                                    PDSCH-CodeMapping-SpreadingFactor,
        multi-CodeInfo
                                    PDSCH-Multi-CodeInfo,
        codeNumber
                                    PDSCH-CodeMapping-CodeNumberComp,
                                        ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs} }
        iE-Extensions
                                                                                                                                  OPTIONAL,
PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
PDSCH-Multi-CodeInfo ::= INTEGER (1..16)
PDSCH-ID ::= INTEGER (0..255)
PDSCHSet-ID ::= INTEGER (0..255)
PICH-Mode ::= ENUMERATED {
    v18,
    v36,
    v72,
    v144,
PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB
```

```
PowerAdjustmentType ::= ENUMERATED {
    none,
    common.
    individual
PowerOffset ::= INTEGER (0..24)
-- PowerOffset = offset * 0.25
-- Unit dB, Range OdB .. +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 (0..16384)
PredictedTUTRANGPSDeviationLimit ::= INTEGER (0..1048575)
```

```
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
PrimaryScramblingCode ::= INTEGER (0..511)
PriorityLevel
                        ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority
PropagationDelay ::= INTEGER (0..255)
-- Unit: chips, step size 3 chips
-- example: 0 = 0chip, 1 = 3chips
SCH-TimeSlot ::= INTEGER (0..6)
PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%
PUSCH-ID ::= INTEGER (0..255)
PUSCHSet-ID ::= INTEGER (0..255)
QE-Selector ::= ENUMERATED {
   selected.
   non-selected
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))
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
ReferenceClockAvailability ::= ENUMERATED {
    available,
    not.Available
ReferenceSFNoffset ::= INTEGER (0..255)
RepetitionLength ::= INTEGER (1..63)
RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64,
    . . .
RepetitionNumber0 ::= INTEGER (0..255)
RepetitionNumber1 ::= INTEGER (1..256)
RefTFCNumber ::= INTEGER (0..3)
ReportCharacteristics ::= CHOICE {
    onDemand
    periodic
                            ReportCharacteristicsType-ReportPeriodicity,
                        ReportCharacteristicsType-EventA,
    event-a
    event-b
                        ReportCharacteristicsType-EventB,
                        ReportCharacteristicsType-EventC,
    event-c
                        ReportCharacteristicsType-EventD,
    event-d
    event-e
                        ReportCharacteristicsType-EventE,
    event-f
                        ReportCharacteristicsType-EventF,
```

```
onModification
                        ReportCharacteristicsType-OnModification
ReportCharacteristicsType-EventA ::= SEQUENCE {
    measurementThreshold
                                    ReportCharacteristicsType-MeasurementThreshold,
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
    measurementHysteresisTime
                                                                                                                        OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs} }
                                                                                                                        OPTIONAL,
        . . .
ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventB ::= SEQUENCE {
    measurementThreshold
                                    ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                                        OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs} }
                                                                                                                        OPTIONAL,
        . . .
ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventC ::= SEQUENCE {
    measurementIncreaseThreshold
                                    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                                    ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs} } 
                                                                                                                        OPTIONAL,
ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold
                                    ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                                    ReportCharacteristicsType-ScaledMeasurementChangeTime,
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
        . . .
ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventE ::= SEQUENCE {
    measurementThreshold1
                                    ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2
                                    ReportCharacteristicsType-MeasurementThreshold
                                                                                                 OPTIONAL,
    measurementHysteresisTime
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                 OPTIONAL,
```

```
reportPeriodicity
                                     ReportCharacteristicsType-ReportPeriodicity
                                                                                                  OPTIONAL.
    iE-Extensions
                                     ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs} }
                                                                                                                         OPTIONAL,
        . . .
ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-EventF ::= SEQUENCE {
    measurementThreshold1
                                    ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2
                                     ReportCharacteristicsType-MeasurementThreshold
                                                                                                  OPTIONAL,
    measurementHysteresisTime
                                    ReportCharacteristicsType-ScaledMeasurementHysteresisTime
                                                                                                 OPTIONAL,
    reportPeriodicity
                                    ReportCharacteristicsType-ReportPeriodicity
                                                                                                  OPTIONAL.
    iE-Extensions
                                     ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs} }
                                                                                                                         OPTIONAL,
ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-OnModification ::= SEQUENCE {
    measurementThreshold
                                    ReportCharacteristicsType-MeasurementThreshold,
    iE-Extensions
                                    ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs} }
                                                                                                                           OPTIONAL,
        . . .
ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    received-total-wide-band-power
                                                             Received-total-wide-band-power-Value-IncrDecrThres,
    transmitted-carrier-power
                                    Transmitted-Carrier-Power-Value,
    ackowledged-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,
    acknowledged-PCPCH-access-preambles
                                            Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles
                                            Detected-PCPCH-access-preambles,
    . . .
ReportCharacteristicsType-MeasurementThreshold ::= CHOICE {
    received-total-wide-band-power
                                                             Received-total-wide-band-power-Value,
    transmitted-carrier-power
                                    Transmitted-Carrier-Power-Value,
    ackowledged-prach-preambles
                                        Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP
                                    UL-TimeslotISCP-Value,
    sir
                                SIR-Value.
```

```
SIR-Error-Value,
    sir-error
    transmitted-code-power
                                    Transmitted-Code-Power-Value.
                                    RSCP-Value.
    rscp
    rx-timing-deviation
                                    Rx-Timing-Deviation-Value,
    round-trip-time
                                    Round-Trip-Time-Value,
                                            Acknowledged-PCPCH-access-preambles,
    acknowledged-PCPCH-access-preambles
    detected-PCPCH-access-preambles
                                            Detected-PCPCH-access-preambles.
    t-utran-gps-measurement-threshold-information
                                                         TUTRANGPSMeasurementThresholdInformation.
                                                         SFNSFNMeasurementThresholdInformation
    sfn-sfn-measurement-threshold-information
ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
    msec
                        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 lhour .. 24hours(day), Step lhour
ResourceOperationalState ::= ENUMERATED {
    enabled,
    disabled
CommonTransportChannel-InformationResponse ::= SEQUENCE
    commonTransportChannelID
                                        CommonTransportChannelID,
```

```
bindingID
                                     BindingID
                                                            OPTIONAL,
   transportLayerAddress
                                     TransportLayerAddress
                                                           OPTIONAL,
   iE-Extensions
                                     CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
LimitedPowerIncrease ::= ENUMERATED {
   used,
   not-used
RL-ID ::= INTEGER (0..31)
RL-Set-ID
                      ::= INTEGER (0..31)
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
RNC-ID
                      ::= INTEGER (0..4095)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]
Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)
RequestedDataValueInformation ::= CHOICE {
    informationAvailable
                              InformationAvailable,
    informationnotAvailable
                              InformationnotAvailable
InformationAvailable::= SEQUENCE {
   requesteddataValue
                          RequestedDataValue,
   ie-Extensions
                          ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs} }
                                                                                                            OPTIONAL,
InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

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```
InformationnotAvailable ::= NULL
RequestedDataValue ::= SEQUENCE {
   dqps-corrections
                       DGPSCorrections OPTIONAL,
   qps-navandrecovery
                      GPS-NavigationModel-and-TimeRecovery
   qps-ionos-model
                       GPS-Ionospheric-Model OPTIONAL,
   gps-utc-model
                       GPS-UTC-Model
                                            OPTIONAL,
   gps-almanac
                       GPS-Almanac
                                            OPTIONAL,
   gps-rt-integrity
                       GPS-RealTime-Integrity OPTIONAL,
   gpsrxpos
                       GPS-RX-POS
                                             OPTIONAL,
   . . .
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
AdjustmentPeriod
                         ::= INTEGER(1..256)
-- Unit Frame
SAT-ID ::= INTEGER (0..63)
SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item
SAT-Info-Almanac-Item ::= SEOUENCE {
   sat-id
                     SAT-ID,
   qps-e-alm
                     BIT STRING (SIZE (16)),
   gps-toa-alm
                     BIT STRING (SIZE (8)),
   gps-delta-I-alm BIT STRING (SIZE (16)),
   omegadot-alm
                     BIT STRING (SIZE (16)),
   svhealth-alm
                     BIT STRING (SIZE (8)),
   gps-a-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)),
   gps-af-one-alm
                     BIT STRING (SIZE (11)),
   ie-Extensions
                     ProtocolExtensionContainer { { SAT-Info-Almanac-Item-ExtIEs} }
                                                                                     OPTIONAL,
SAT-Info-Almanac-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
   . . .
SAT-Info-DGPSCorrections ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-DGPSCorrections-Item
```

```
SAT-Info-DGPSCorrections-Item ::= SEQUENCE {
    sat-id
                                            SAT-ID,
    iode-daps
                                            BIT STRING (SIZE (8)),
    udre
                                            UDRE,
                                            PRC.
    prc
    range-correction-rate
                                            Range-Correction-Rate,
    ie-Extensions
                                            ProtocolExtensionContainer { { SAT-Info-DGPSCorrections-Item-ExtIEs} } OPTIONAL,
SAT-Info-DGPSCorrections-Item-ExtlEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
SATInfo-RealTime-Integrity ::= SEOUENCE (SIZE (1..maxNoSat)) OF SAT-Info-RealTime-Integrity-Item
SAT-Info-RealTime-Integrity-Item ::= SEQUENCE {
  bad-sat-id
                   SAT-ID,
                ProtocolExtensionContainer { { SAT-Info-RealTime-Integrity-Item-ExtIEs} }
  ie-Extensions
                                                                                                                     OPTIONAL,
SAT-Info-RealTime-Integrity-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ScaledAdjustmentRatio
                                ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100
MaxAdjustmentStep
                            ::= INTEGER(1..10)
-- Unit Slot
ScramblingCodeNumber ::= INTEGER (0..15)
SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)
Segment-Type ::= ENUMERATED {
        first-segment,
        first-segment-short,
        subsequent-segment,
        last-segment,
        last-segment-short,
        complete-SIB,
        complete-SIB-short,
S-FieldLength ::= ENUMERATED {
        v1,
        v2,
        . . .
```

```
SFN ::= INTEGER (0..4095)
SFNSFN ::= INTEGER (0..40961)
SFNSFNChangeLimit ::= INTEGER (0..16384)
SFNSFNDriftRate ::= INTEGER (-16384..16384)
SFNSFNDriftRateQuality ::= INTEGER (0..16384)
SFNSFNMeasurementThresholdInformation::= SEQUENCE {
    sFNSFNChangeLimit
                                         SFNSFNChangeLimit
                                                                               OPTIONAL,
    predictedSFNSFNDeviationLimit
                                         PredictedSFNSFNDeviationLimit
                                                                               OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} }
                                                                                                                           OPTIONAL,
SFNSFNMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNMeasurementValueInformation ::= SEOUENCE {
    \verb|successful| 1 \\ \verb|NeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation| \\
                                                                                           SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uC-Id
                                         UC-Id,
            sFNSFN
                        SFNSFN.
            sFNSFNOuality
                                 SFNSFNOuality,
            sFNSFNDriftRate
                                 SFNSFNDriftRate,
            sFNSFNDriftRateQuality
                                         SFNSFNDriftRateQuality,
                                         SFNSFNTimeStamp,
            sFNSFNTimeStamp
                                 ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
            iE-Extensions
ExtIEs } }
                OPTIONAL,
            . . .
    unsuccessfull \verb+Neighbouring+ CellSFNSFNObserved+ Time \verb+Difference+ Measurement+ Information
                                                                                           SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
            uC-Id
                                         UC-Id,
            iE-Extensions
                                 ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs } }
                OPTIONAL,
        },
                        ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} }
    iE-Extensions
                                                                                                                           OPTIONAL,
SFNSFNMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SFNSFNOuality ::= INTEGER (0..1048575)
ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec
SIB-Originator ::= ENUMERATED {
    nodeB,
    cRNC,
    . . .
SIR-Error-Value ::= INTEGER (0..125)
SFNSFNTimeStamp::= SEQUENCE {
    sFN
                        SFN,
    timeSlot
                        TimeSlot,
    iE-Extensions
                                    ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} }
                                                                                                                     OPTIONAL,
SFNSFNTimeStamp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)
SIR-Value ::= INTEGER (0..63)
-- According to mapping in [22]/[23]
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
SpecialBurstScheduling ::= INTEGER (1..256)
SSDT-Cell-Identity ::= ENUMERATED {a, b, c, d, e, f, g, h}
SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
```

```
SSDT-Indication ::= ENUMERATED {
    ssdt-active-in-the-UE,
    ssdt-not-active-in-the-UE
Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    start-of-audit-sequence,
    not-start-of-audit-sequence
STTD-Indicator ::= ENUMERATED {
    active,
    inactive,
    . . .
SSDT-SupportIndicator ::= ENUMERATED
    sSDT-Supported,
    sSDT-not-supported
SyncCase ::= INTEGER (1..2,...)
SYNCDlCodeId ::= INTEGER (1..32,...)
SyncFrameNumber ::= INTEGER (1..10)
SynchronisationReportCharacteristics ::= SEQUENCE {
    synchronisationReportCharacteristicsType
                                                SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc SynchronisationReportCharactThreExc
                                                                                 OPTIONAL
        -- Thie IE shall be included if the synchronisationReportCharacteristicsType IE is set to "thresholdExceeding".
SynchronisationReportCharactThreExc::= SEQUENCE (SIZE (1..maxNrOfCellSyncBursts)) OF SynchronisationReportCharactThreInfoItem
SynchronisationReportCharactThreInfoItem ::= SEQUENCE {
    syncFrameNumber
                                SyncFrameNumber,
    cellSyncBurstInformation
                                SEQUENCE (SIZE (1.. maxNrOfReceptsPerSyncFrame)) OF SynchronisationReportCharactCellSyncBurstInfoItem,
                                ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } }
    iE-Extensions
SynchronisationReportCharactThreInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SynchronisationReportCharactCellSyncBurstInfoItem ::= SEQUENCE {
    cellSyncBurstCode
                                    CellSyncBurstCode,
    cellSyncBurstCodeShift
                                    CellSyncBurstCodeShift,
    cellSyncBurstTiming
                                    CellSyncBurstTiming
                                                                    OPTIONAL,
    cellSyncBurstTimingThreshold
                                    CellSyncBurstTimingThreshold
                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs } }
```

```
SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
SynchronisationReportCharacteristicsType ::= ENUMERATED {
   frameRelated,
   sFNperiodRelated,
   cycleLengthRelated,
   thresholdExceeding,
   frequencyAcquisitionCompleted,
   . . .
SynchronisationReportType ::= ENUMERATED {
   initialPhase,
   steadyStatePhase,
   lateEntrantCell,
   frequencyAcquisition,
-- -----
T-Cell ::= ENUMERATED {
   ν0,
   v1,
   v2,
   v3,
   v4,
   v5,
   v6,
   v7,
   v8,
   v9
T-RLFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range Os .. 25.5s, Step 0.1s
TDD-ChannelisationCode ::= ENUMERATED {
   chCodeldiv1,
   chCode2div1,
   chCode2div2,
   chCode4div1,
   chCode4div2,
   chCode4div3,
   chCode4div4,
   chCode8div1,
```

```
chCode8div2,
    chCode8div3,
    chCode8div4.
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6.
    chCode16div7.
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
TDD-ChannelisationCodeLCR ::= CHOICE {
    sf1
                        SF1-ChannelisationCode,
    sfx
                        TDD-ChannelisationCode,
SF1-ChannelisationCode ::= ENUMERATED {
    c-QPSK,
    c-8PSK,
    . . .
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-ExtlEs 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.
    iE-Extensions
                                            ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs} }
                                                                                                                           OPTIONAL,
TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TDD-DPCHOffset ::= CHOICE {
    initialOffset
                        INTEGER (0..255),
    noinitialOffset
                        INTEGER (0..63)
TDD-PhysicalChannelOffset ::= INTEGER (0..63)
TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors
                                SEQUENCE {
        gainFactor
                                    CHOICE {
            fdd
                                        SEQUENCE +
                                            BetaCD,
                betaC
                betaD
                                             BetaCD,
                iE-Extensions
                                    ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } }
                                                                                                  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 ::= SEOUENCE (SIZE (1...maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem
TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    iE-Extensions
                                            ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs} }
                                                                                                                           OPTIONAL,
TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    . . .
TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
TFCI-Presence ::= ENUMERATED {
    present,
    not-present
TFCI-SignallingMode ::= SEQUENCE {
    tFCI-SignallingOption
                                TFCI-SignallingMode-TFCI-SignallingOption,
    splitType
                            TFCI-SignallingMode-SplitType
                                                                         OPTIONAL,
    -- This IE shall be present if the TFCI signalling option is split --
                                TFCI-SignallingMode-LengthOfTFCI2
    lengthOfTFCI2
                                                                             OPTIONAL,
    -- This IE shall be present if the split type is logical --
    iE-Extensions
                                ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} }
                                                                                                                     OPTIONAL,
TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
TFCI-SignallingMode-LengthOfTFCI2 ::= INTEGER (1..10)
TFCI-SignallingMode-SplitType ::= ENUMERATED {
   hard,
    logical
TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    split
TFCI2-BearerInformationResponse ::= SEQUENCE {
    bindingID
                                                     BindingID,
    transportLayerAddress
                                                    TransportLayerAddress,
    iE-Extensions
                                                     ProtocolExtensionContainer { { TFCI2-BearerInformationResponse-ExtIEs} }
                                                                                                                                 OPTIONAL,
TFCI2-BearerInformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
                    ::= INTEGER (0|15..269)
TGD
-- 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,
    . . .
TimeSlotLCR ::= INTEGER (0..6)
TimeSlotStatus ::= ENUMERATED {
    active,
    not-active,
```

```
TimingAdjustmentValue ::= CHOICE {
    initialPhase
                        INTEGER (0..255),
    steadyStatePhase
                       INTEGER (0..1048575)
TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
-- For 1.28Mcps TDD TimingAdvanceApplied = No
ToAWE ::= INTEGER (0..2559)
-- Unit ms
ToAWS ::= INTEGER (0..1279)
-- Unit ms
Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
    SEOUENCE {
        tGPSID
                        TGPSID,
        tGSN
                        TGSN,
        tGL1
                        GapLength,
        tGL2
                        GapLength OPTIONAL,
        tGD
                        TGD,
        tGPL1
                        GapDuration,
        tGPL2
                        GapDuration OPTIONAL,
        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,
                                ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
        iE-Extensions
Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
   code-change,
   nocode-change
Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [4]/[5]
Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [4]/[5]
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,
        split-in-TFCI
                                    SEOUENCE {
            transportFormatCombination-DCH
                                                TFCS-DCHList,
            signallingMethod
                                                CHOICE {
                                                TFCS-MapingOnDSCHList,
                tFCI-Range
                explicit
                                                    TFCS-DSCHList,
                . . .
            iE-Extensions
                                                ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } }
                                                                                                                       OPTIONAL,
                        ProtocolExtensionContainer { { TFCS-ExtIEs} }
                                                                            OPTIONAL,
    iE-Extensions
Split-in-TFCI-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    SEQUENCE {
        cTFC
                            TFCS-CTFC,
        tFC-Beta
                        TransportFormatCombination-Beta
                                                            OPTIONAL,
```

```
ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs} }
        iE-Extensions
                                                                                       OPTIONAL,
TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-CTFC ::= CHOICE {
                                       INTEGER (0..3),
    ctfc2bit
    ctfc4bit
                                       INTEGER (0..15),
    ctfc6bit
                                       INTEGER (0..63),
                                       INTEGER (0..255),
    ctfc8bit
    ctfc12bit
                                       INTEGER (0..4095),
    ctfc16bit
                                       INTEGER (0..65535),
    ctfcmaxbit
                                       INTEGER (0..maxCTFC)
TFCS-DCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI1Combs)) OF
    SEOUENCE {
       CTFC
                           TFCS-CTFC.
                           ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs} }
       iE-Extensions
                                                                                       OPTIONAL,
TFCS-DCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-MapingOnDSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
    SEQUENCE {
       maxTFCI-field2-Value
                                   TFCS-MaxTFCI-field2-Value,
       cTFC-DSCH
                               TFCS-CTFC,
                                   ProtocolExtensionContainer { { TFCS-MapingOnDSCHList-ExtIEs} }
                                                                                                                      OPTIONAL,
       iE-Extensions
    . . .
TFCS-MapingOnDSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxNrOfTFCI2Combs-1)
TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
    SEOUENCE {
       cTFC-DSCH
                               TFCS-CTFC,
       iE-Extensions
                                   ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs} }
TFCS-DSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
TransportBearerRequestIndicator ::= ENUMERATED {
   bearerRequested.
   bearerNotRequested,
TransportFormatSet ::= SEOUENCE {
   dvnamicParts
                         TransportFormatSet-DynamicPartList,
   semi-staticPart
                         TransportFormatSet-Semi-staticPart,
   iE-Extensions
                         ProtocolExtensionContainer { { TransportFormatSet-ExtIEs} }
                                                                                        OPTIONAL,
   . . .
TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
   SEOUENCE {
       nrOfTransportBlocks
                                 TransportFormatSet-NrOfTransportBlocks,
       transportBlockSize
                                TransportFormatSet-TransportBlockSize
                                                                         OPTIONAL,
       -- This IE shall be present if the Number of Transport Blocks IE is set to a value greater than 0
                                 TransportFormatSet-ModeDP,
       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"
   iE-Extensions
                                        ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
   SEOUENCE {
       transmissionTimeInterval
                                    TransportFormatSet-TransmissionTimeIntervalDynamic,
   iE-Extensions
                                    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'
    rateMatcingAttribute
                                    TransportFormatSet-RateMatchingAttribute,
    cRC-Size
                                    TransportFormatSet-CRC-Size,
    mode
                                    TransportFormatSet-ModeSSP
    iE-Extensions
                                    ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs} }
                                                                                                                        OPTIONAL,
TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-ChannelCodingType ::= ENUMERATED {
    no-coding,
    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-rlated,
    timeSlot-related,
TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    . . .
TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    . . . ,
    msec-5
TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)
TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))
TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
TUTRANGPS ::= INTEGER (0..37158911999999)
TUTRANGPSChangeLimit ::= INTEGER (0..1048575)
TUTRANGPSDriftRate ::= INTEGER (-16385..16384)
TUTRANGPSDriftRateQuality ::= INTEGER (0..16383)
TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
{\tt TUTRANGPSMeasurementThresholdInformation} ::= {\tt SEQUENCE} \ \{
    tUTRANGPSChangeLimit
                                             TUTRANGPSChangeLimit
                                                                                       OPTIONAL,
    predictedTUTRANGPSDeviationLimit
                                             PredictedTUTRANGPSDeviationLimit
                                                                                       OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} }
                                                                                                                             OPTIONAL,
```

OPTIONAL,

```
TUTRANGPSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
       tUTRANGPS
                                     TUTRANGPS,
       tUTRANGPSQuality
                                     TUTRANGPSQuality,
       tUTRANGPSDriftRate
                                     TUTRANGPSDriftRate,
       tUTRANGPSDriftRateQuality
                                     TUTRANGPSDriftRateQuality,
       iE-Extensions
                                     ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} }
TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
TUTRANGPSQuality ::= INTEGER (0..1048574)
TypeOfError ::= ENUMERATED {
   not-understood,
   missing,
__ ______
-- -----
UARFCN ::= INTEGER (0..16383, ...)
-- corresponds to 1885.2MHz .. 2024.8MHz
UC-Id ::= SEQUENCE {
   rNC-ID
                      RNC-ID,
   c-ID
                      C-ID,
                         ProtocolExtensionContainer { {UC-Id-ExtIEs} } OPTIONAL,
   iE-Extensions
UC-Id-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UDRE ::= ENUMERATED {
   udre-minusequal-one-m,
   udre-betweenoneandfour-m,
   udre-betweenfourandeight-m,
   udre-greaterequaleight-m
```

```
UL-CapacityCredit ::= INTEGER (0..65535)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2.
    higher-layer-scheduling,
UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem
UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                            TimeSlot,
    midambleShiftAndBurstType
                                            MidambleShiftAndBurstType,
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-InformationList
                                            TDD-UL-Code-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-Timeslot-InformationItem-ExtIEs} }
                                                                                                                       OPTIONAL,
UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeslotLCR-InformationItem
UL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence,
    uL-Code-InformationList
                                            TDD-UL-Code-LCR-Information,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} }
    . . .
UL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)
UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]
```

```
UL-FP-Mode ::= ENUMERATED {
    normal,
    silent.
UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
UL-ScramblingCode ::= SEQUENCE {
    uL-ScramblingCodeNumber
                                    UL-ScramblingCodeNumber,
    uL-ScramblingCodeLength
                                    UL-ScramblingCodeLength,
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } }
                                                                                                                     OPTIONAL,
UL-ScramblingCode-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
UL-ScramblingCodeNumber ::= INTEGER (0..16777215)
UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem
UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    iSCP
                                    UL-TimeslotISCP-Value,
                                    ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
UL-TimeSlot-ISCP-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeSlot-ISCP-LCR-InfoItem
UL-TimeSlot-ISCP-LCR-InfoItem ::= SEOUENCE {
    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 ::= {
```

```
USCH-Information ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem
USCH-InformationItem ::= SEQUENCE {
   uSCH-ID
                                 USCH-ID,
   cCTrCH-ID
                                 CCTrCH-ID,
   transportFormatSet
                                 TransportFormatSet,
   allocationRetentionPriority
                                 AllocationRetentionPriority,
                                 ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                         OPTIONAL,
USCH-InformationItem-ExtIEs NBAP-PROTOCOL-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)
__ ______
-- -----
-- -----
-- -----
```

9.3.5 Common Definitions

```
*****************
-- Common definitions
__ ********************
NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-CommonDataTypes (3) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
  *****************
-- Extension constants
__ ********************
maxPrivateIEs
                       INTEGER ::= 65535
maxProtocolExtensions
                       INTEGER ::= 65535
maxProtocolIEs
                       INTEGER ::= 65535
__ *********************
-- Common Data Types
__ *******************
          ::= ENUMERATED { reject, ignore, notify }
Criticality
MessageDiscriminator ::= ENUMERATED { common, dedicated }
           ::= ENUMERATED { optional, conditional, mandatory }
Presence
PrivateIE-ID ::= CHOICE {
  local
                 INTEGER (0..maxPrivateIEs),
   global
                 OBJECT IDENTIFIER
ProcedureCode ::= INTEGER (0..255)
```

```
ProcedureID
               ::= SEQUENCE {
    procedureCode
                           ProcedureCode.
    ddMode
                           ENUMERATED { tdd, fdd, common, ... }
ProtocolExtensionID ::= INTEGER (0..maxProtocolExtensions)
ProtocolIE-ID
                   ::= INTEGER (0..maxProtocolIEs)
TransactionID
                 ::= CHOICE {
    shortTransActionId
                           INTEGER (0..127),
                           INTEGER (0..32767)
    longTransActionId
TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessfull-outcome, outcome }
END
```

9.3.6 Constant Definitions

```
__ **********************************
-- Constant definitions
NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
   ProcedureCode,
   ProtocolIE-ID
FROM NBAP-CommonDataTypes;
  -- Elementary Procedures
                                                ProcedureCode ::= 0
id-audit
id-auditRequired
                                                ProcedureCode ::= 1
id-blockResource
                                                ProcedureCode ::= 2
id-cellDeletion
                                                ProcedureCode ::= 3
id-cellReconfiguration
                                                ProcedureCode ::= 4
```

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```
INTEGER ::= 6
maxNrOfDLTSLCRs
maxNrOfDLCodes
                            INTEGER ::= 8
maxNrOfErrors
                            INTEGER ::= 256
maxNrOfTFs
                            INTEGER ::= 32
maxNrOfTFCs
                            INTEGER ::= 1024
maxNrOfRLs
                            INTEGER ::= 16
maxNrOfRLs-1
                            INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-2
                            INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLSets
                            INTEGER ::= maxNrOfRLs
                            INTEGER ::= 240
maxNrOfDPCHs
maxNrOfDPCHLCRs
                            INTEGER ::= 240
maxNrOfSCCPCHs
                            INTEGER ::= 8
                            INTEGER ::= 4
maxNrOfCPCHs
maxNrOfPCPCHs
                            INTEGER ::= 64
maxNrOfDCHs
                            INTEGER ::= 128
maxNrOfDSCHs
                            INTEGER ::= 32
                            INTEGER ::= 8
maxNrOfFACHs
maxNrOfCCTrCHs
                            INTEGER ::= 16
maxNrOfPDSCHs
                            INTEGER ::= 256
maxNrOfPUSCHs
                            INTEGER ::= 256
maxNrOfPDSCHSets
                            INTEGER ::= 256
                            INTEGER ::= 8
maxNrOfPRACHLCRs
                            INTEGER ::= 256
maxNrOfPUSCHSets
maxNrOfSCCPCHLCRs
                            INTEGER ::= 8
maxNrOfULTSs
                            INTEGER ::= 15
maxNrOfULTSLCRs
                            INTEGER ::= 6
maxNrOfUSCHs
                            INTEGER ::= 32
maxAPSiqNum
                            INTEGER ::= 16
maxNrOfSlotFormatsPRACH
                            INTEGER ::= 8
maxCellinNodeB
                            INTEGER ::= 256
maxCCPinNodeB
                            INTEGER ::= 256
maxCPCHCell
                            INTEGER ::= maxNrOfCPCHs
maxCTFC
                            INTEGER ::= 16777215
                            INTEGER ::= maxCellinNodeB
maxLocalCellinNodeB
maxNoofLen
                            INTEGER ::= 7
maxFPACHCell
                            INTEGER ::= 8
maxRACHCell
                            INTEGER ::= maxPRACHCell
maxPRACHCell
                            INTEGER ::= 16
maxPCPCHCell
                            INTEGER ::= 64
maxSCCPCHCell
                            INTEGER ::= 32
maxSCPICHCell
                            INTEGER ::= 32
maxTTI-count
                            INTEGER ::= 4
maxIBSEG
                            INTEGER ::= 16
maxTB
                            INTEGER ::= 64
maxFACHCell
                            INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching
                            INTEGER ::= 256
maxCodeNrComp-1
                            INTEGER ::= 256
maxNrOfCellSyncBursts
                            INTEGER ::= 10
maxNrOfCodeGroups
                            INTEGER ::= 256
maxNrOfReceptsPerSyncFrame
                            INTEGER ::= 16
maxNrOfMeasNCell
                            INTEGER ::= 96
maxNrOfMeasNCell-1
                            INTEGER ::= 95
                                            -- maxNrOfMeasNCell - 1
maxNrOfTFCIGroups
                            INTEGER ::= 256
```

```
INTEGER ::= 512
maxNrOfTFCI1Combs
maxNrOfTFCI2Combs
                           INTEGER ::= 1024
maxNrOfTFCI2Combs-1
                           INTEGER ::= 1023
maxNrOfSF
                           INTEGER ::= 8
maxTGPS
                           INTEGER ::= 6
                           INTEGER ::= 1048575
maxCommunicationContext
maxNrOfLevels
                           INTEGER ::= 256
maxNoSat
                           INTEGER ::= 16
maxNoGPSItems
                           INTEGER ::= 8
  ******************
-- IEs
__ *********************
id-AICH-Information
                                                                  ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd
                                                                  ProtocolIE-ID ::= 1
id-BCH-Information
                                                                  ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd
                                                                  ProtocolIE-ID ::= 8
id-BCCH-ModificationTime
                                                                  ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator
                                                                  ProtocolIE-ID ::= 10
id-Cause
                                                                  ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp
                                                                  ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp
                                                                  ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd
                                                                  ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp
                                                                  ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd
                                                                  ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp
                                                                  ProtocolIE-ID ::= 19
id-CellParameterID
                                                                  ProtocolIE-ID ::= 23
id-CFN
                                                                  ProtocolIE-ID ::= 24
id-C-TD
                                                                  ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy
                                                                  ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt
                                                                  ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rgst
                                                                  ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp
                                                                  ProtocolIE-ID ::= 33
id-CommonMeasurementType
                                                                  ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID
                                                                  ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD
                                                                  ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRgstTDD
                                                                  ProtocolIE-ID ::= 37
id-CommunicationControlPortID
                                                                  ProtocolIE-ID ::= 40
id-ConfigurationGenerationID
                                                                  ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID
                                                                  ProtocolIE-ID ::= 44
id-CriticalityDiagnostics
                                                                  ProtocolTE-TD ::= 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
```

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io	d-DCH-InformationResponse	ProtocolIE-ID	::=	59
io	d-FDD-DCHs-to-Modify	ProtocolIE-ID	::=	62
io	d-TDD-DCHs-to-Modify	ProtocolIE-ID	::=	63
io	d-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID	::=	65
io	d-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID	::=	67
ic	d-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID	::=	68
	d-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID	::=	69
io	d-DedicatedMeasurementType	ProtocolIE-ID	::=	70
io	d-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID	::=	72
ic	d-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID	::=	73
ic	d-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID	::=	76
ic	d-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID	::=	77
ic	d-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID	::=	79
ic	d-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID	::=	81
io	d-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID	::=	82
io	d-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID	::=	83
	d-DL-ReferencePowerInformationItem-DL-PC-Rgst	ProtocolIE-ID	::=	84
io	d-DLReferencePower	ProtocolIE-ID	::=	85
io	d-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID	::=	86
io	d-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID	::=	87
	d-DSCHs-to-Add-FDD	ProtocolIE-ID	::=	89
io	d-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID	::=	91
io	d-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID		
	d-DSCHs-to-Add-TDD	ProtocolIE-ID	::=	96
io	d-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID	::=	98
ic	d-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID	::=	100
io	d-DSCH-InformationResponse	ProtocolIE-ID	::=	105
io	d-DSCH-FDD-Information	ProtocolIE-ID	::=	106
io	d-DSCH-TDD-Information	ProtocolIE-ID	::=	107
ic	d-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID	::=	108
ic	d-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID	::=	112
ic	d-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID	::=	113
	d-FACH-Information	ProtocolIE-ID	::=	116
ic	d-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID	::=	117
io	d-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID	::=	120
ic	d-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID	::=	121
io	d-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID	::=	122
ic	d-IndicationType-ResourceStatusInd	ProtocolIE-ID	::=	123
ic	d-Local-Cell-ID	ProtocolIE-ID	::=	124
ic	d-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID	::=	2
ic	d-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID		
ic	d-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID	::=	4
ic	d-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID	::=	5
ic	d-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID	::=	125
ic	d-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID	::=	126
ic	d-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID	::=	127
ic	d-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID	::=	128
ic	d-AdjustmentPeriod	ProtocolIE-ID	::=	129
	d-MaxAdjustmentStep	ProtocolIE-ID	::=	130
	d-MaximumTransmissionPower	ProtocolIE-ID		
ic	d-MeasurementFilterCoefficient	ProtocolIE-ID	::=	132
	d-MeasurementID	ProtocolIE-ID		
ic	d-MessageStructure	ProtocolIE-ID	: :=	115

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id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
<pre>id-PUSCH-Information-AddListIE-PSCH-ReconfRqst id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst</pre>	ProtocolIE-ID ::= 185 ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRgst	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-ReconfRgstFDD	ProtocoliE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocoliE-ID ::= 262
	ProtocoliE-ID ::= 263
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	
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-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-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-ReconfigstFDD	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 ::= 304 ProtocoliE-ID ::= 306
	ProtocoliE-ID ::= 309
id-USCH-InformationResponse id-USCH-Information	
	ProtocolIE-ID ::= 310
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315 ProtocolIE-ID ::= 316
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359

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id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
<pre>id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD</pre>	ProtocolIE-ID ::= 408
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 409
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 412 ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocoliE-ID ::= 414 ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocoliE-ID ::= 416 ProtocolIE-ID ::= 417
id-TFC12-Bearer-Information-RL-SecupRqstFDD id-TFC12-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocoliE-ID ::= 417 ProtocolIE-ID ::= 418
id-TFC12-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TimingAdvanceApplied	ProtocoliE-ID ::= 287
id-CFNReportingIndicator	ProtocoliE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425

id GallG and another control of the GallG and Daniel TD	D
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDM	D 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-ReconfRgstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRgstTDD	ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 80
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
	ProtocoliE-ID ::= 174 ProtocoliE-ID ::= 290
id-FPACH-LCR-Information	ProtocoliE-ID ::= 290 ProtocolIE-ID ::= 292
id-FPACH-LCR-Information-AuditRsp	
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 310
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
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-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 464
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-SetupRgstTDD
                                                                    ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD
                                                                    ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rast
                                                                    ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRgstTDD
                                                                    ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRgstTDD
                                                                    ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRgstTDD
                                                                    ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD
                                                                    ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRgstTDD
                                                                    ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RgstTDD
                                                                    ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList
                                                                    ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD
                                                                    ProtocolIE-ID ::= 484
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-PDSCH-ModifyInformation-LCR-PSCH-ReconfRgst
                                                                    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-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
```

END

9.3.7 Container Definitions

DEFINITIONS AUTOMATIC TAGS ::=

```
BEGIN
__ *********************
-- IE parameter types from other modules.
__ ********************
IMPORTS
   maxProtocolExtensions.
  maxPrivateIEs.
  maxProtocolIEs,
  Criticality,
   Presence,
   PrivateIE-ID,
   ProtocolExtensionID,
   ProtocolIE-ID
FROM NBAP-CommonDataTypes;
__ ********************
-- Class Definition for Protocol IEs
NBAP-PROTOCOL-IES ::= CLASS {
        ProtocolIE-ID
                           UNIQUE,
   &criticality Criticality,
   &Value,
   &presence Presence
WITH SYNTAX {
        &id
   CRITICALITY &criticality
           &Value
   PRESENCE
           &presence
__ **********************
-- Class Definition for Protocol IEs
NBAP-PROTOCOL-IES-PAIR ::= CLASS {
            ProtocolIE-ID
                              UNIQUE,
   &firstCriticality Criticality,
   &FirstValue,
   &secondCriticality Criticality,
   &SecondValue,
   &presence
              Presence
```

```
WITH SYNTAX {
            &id
   FIRST CRITICALITY &firstCriticality
   FIRST TYPE
               &FirstValue
   SECOND CRITICALITY &secondCriticality
               &SecondValue
   SECOND TYPE
   PRESENCE
               &presence
    -- Class Definition for Protocol Extensions
__ *********************
NBAP-PROTOCOL-EXTENSION ::= CLASS {
        ProtocolExtensionID
                               UNIQUE,
   &criticality
               Criticality,
   &Extension,
   &presence
               Presence
WITH SYNTAX {
         &id
   CRITICALITY &criticality
   EXTENSION &Extension
   PRESENCE
            &presence
    *****************
-- Class Definition for Private IEs
__ **********************************
NBAP-PRIVATE-IES ::= CLASS {
   &id
       PrivateIE-ID,
   &criticality Criticality,
   &Value,
   &presence
               Presence
WITH SYNTAX {
         &id
   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 {
                                 ({IEsSetParam}),
   id NBAP-PROTOCOL-IES.&id
   criticality NBAP-PROTOCOL-IES.&criticality ({IEsSetParam}{@id}),
                                     ({IEsSetParam}{@id})
            NBAP-PROTOCOL-IES.&Value
  -- Container for Protocol IE Pairs
  ******************
ProtocolIE-ContainerPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
   SEQUENCE (SIZE (0..maxProtocolIEs)) OF
   ProtocolIE-FieldPair {{IEsSetParam}}
ProtocolIE-FieldPair {NBAP-PROTOCOL-IES-PAIR : IESSetParam} ::= SEOUENCE {
       NBAP-PROTOCOL-IES-PAIR.&id
                                               ({IEsSetParam}),
                                                            ({IEsSetParam}{@id}),
   firstCriticality
                       NBAP-PROTOCOL-IES-PAIR.&firstCriticality
   firstValue
                   NBAP-PROTOCOL-IES-PAIR.&FirstValue ({IEsSetParam}{@id}),
   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})
    ******************
-- Container for Private IEs
  ****************
PrivateIE-Container {NBAP-PRIVATE-IES : IEsSetParam} ::=
   SEQUENCE (SIZE (1..maxPrivateIEs)) OF
   PrivateIE-Field {{IEsSetParam}}
PrivateIE-Field {NBAP-PRIVATE-IES : IESSetParam} ::= SEQUENCE {
              NBAP-PRIVATE-IES.&id
   ({IEsSetParam}),
   criticality
                     NBAP-PRIVATE-IES.&criticality
   ({IEsSetParam}{@id}),
              NBAP-PRIVATE-IES.&Value
   ({IEsSetParam}{@id})
END
```

9.4 Message Transfer Syntax

NBAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ref. [11].

9.5 Timers

 $T_{Preempt}$

 Specifies the maximum time that a Node B may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

Handling of unknown, unforeseen and erroneous protocol data

10.1 General

Protocol Error cases can be divided into three classes:

- Transfer Syntax Error
- Abstract Syntax Error
- Logical Error

Protocol errors can occur in the following functions within a receiving node:

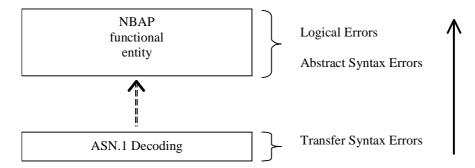


Figure 38: Protocol Errors in NBAP.

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 concerning 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.

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) results 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 case 4 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).
 - Note that this restriction is applicable to a sending entity for constructing messages.
- 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 concerning 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.

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.

10.3.4.2 IEs other than the Procedure ID

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure ID* 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 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 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.

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. The Repetition Number IE shall be included in the Information Element Criticality Diagnostics IE if the reported IE/IE group was part of a "SEQUENCE OF" definition.

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. The Repetition Number IE shall be included in the Information Element Criticality Diagnostics IE if the reported IE/IE group was part of a "SEQUENCE OF" definition.

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 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 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 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 initiate the Error Indication procedure.

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 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.

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.

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.

10.3.6 IEs or IE groups received in wrong order or with too many occurrences

If a message with IEs or IE groups in wrong order or with too many occurrences is received, 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, 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, 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, the receiving node shall 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 failure message, the failure 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 failure message, 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, 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.

Annex A (normative):

Allocation and Pre-emption of Radio Links in the Node B

A.1 Deriving Allocation Information for a Radio Link

A.1.1 Establishment of a New Radio Link

The Allocation Information for a Radio Link in the case of establishment of a new Radio Link shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

Note: The Allocation/Retention Priority IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B or
- b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels that are intended to use the Radio Link is set to "not used", 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 "not used", 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 "not used" shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link.
 - The allocation priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all non excluded transport channels that are intended to use the Radio Link.
 - If all non-excluded transport channels that are intended to use a Radio Link to be established have the preemption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to "shall not trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".
 - If one or more non-excluded transport channels that are intended to use the Radio Link to be established have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to "may trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "may trigger pre-emption".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

A.1.2 Modification of an Existing Radio Link

The Allocation Information for a Radio Link in the case of modification of a Radio Link (addition or modification of transport channels using the Radio Link) shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

Note: The Allocation/Retention Priority IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the Node B Communication Context in the Node B
- b) a previous procedure adding or modifying the transport channel, or
- c) the current procedure adding or modifying the transport channel.

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels to be added or modified in the Radio Link is set to "not used", 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 "not used", 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 "not used" 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 c

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 "not used", 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 "not used", the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
 - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
 - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to "pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "pre-emptable".

 If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to "not pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "not pre-emptable".

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

A.3 The Allocation/Retention Process

The Node B shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio Link to be established or modified. The Allocation Information is derived according to clause A.1.
- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the cell.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- -. If the pre-emption capability for a Radio Link to be established or modified is set to "may trigger preemption" and the resource situation so requires, the Node B may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- -. If the pre-emption capability for a Radio Link to be established or modified is set to "shall not trigger pre-emption", then this allocation request shall not trigger the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to "pre-emptable", then this Radio Link shall be included in the pre-emption process in clause A.4.
- -. If the pre-emption vulnerability for an existing Radio Link is set to "not pre-emptable", then this Radio Link shall not be included in the pre-emption process in clause A.4.

A.4 The Pre-emption Process

The pre-emption process shall only pre-empt Radio Links with lower retention priority than the allocation priority of the Radio Link to be established or modified. The Radio Links to be pre-empted shall be selected in ascending order of the retention priority.

When the pre-emption process detects that one or more Radio Links have to be pre-empted to free resources for a Radio Link(s) to be established or modified, the Node B shall initiate the Radio Link Pre-emption procedure for all the Node B Communication Contexts having Radio Links selected for pre-emption and start the $T_{Preempt}$ timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the Node B shall stop the $T_{Preempt}$ timer and complete the procedure that triggered the pre-emption process in accordance with the "Successful Operation" subclause of the procedure.

If the T_{Preempt} timer expires, the Node B shall regard the procedure that triggered the pre-emption process as failed and complete the procedure in accordance with the "Unsuccessful Operation" subclause of the procedure.

Annex B (informative): Measurement reporting

When the *Report Characteristics* IE is set to 'Event A' (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

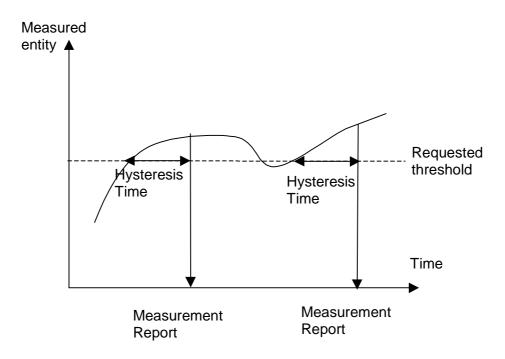


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to 'Event B' (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

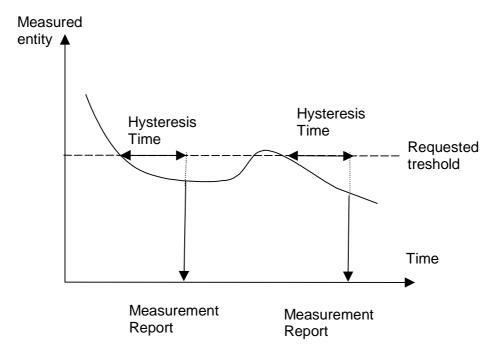


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to 'Event C' (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

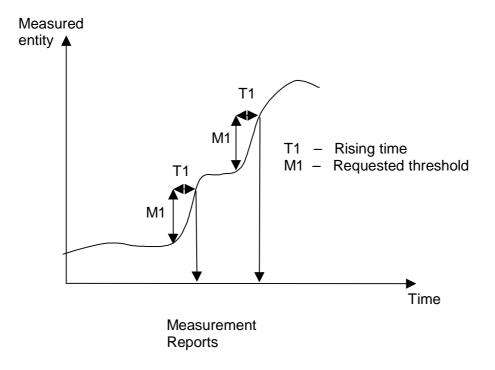


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to 'Event D' (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

550

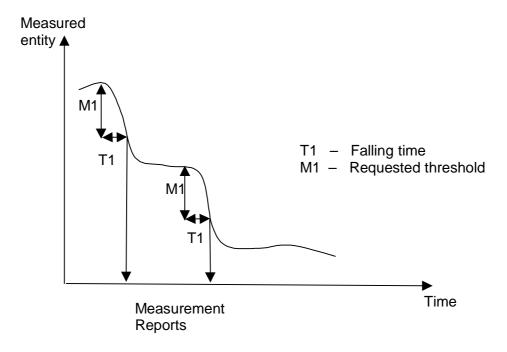


Figure B.4: Event D reporting

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.

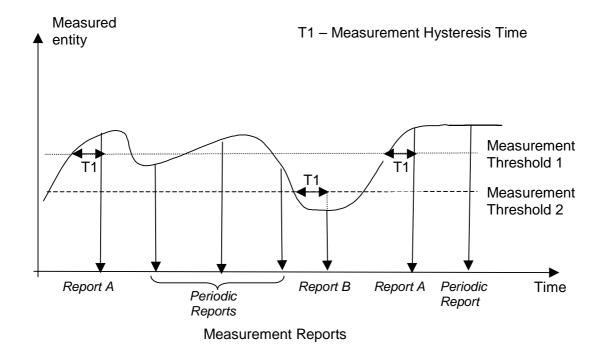


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

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.

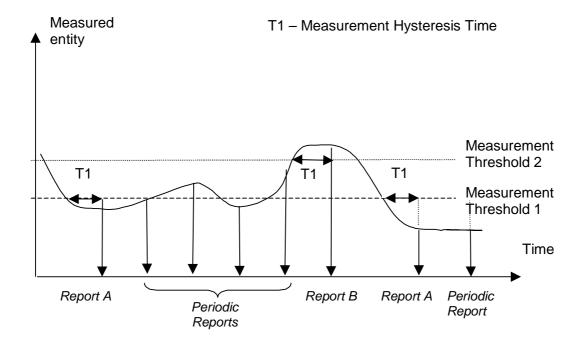


Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

Measurement Reports

Annex C (informative) Guidelines for Usage of the Criticality Diagnostics IE

C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE type and referenc	Semantics description	Criticality	Assigned Criticality
			е			
Message Type	M				YES	reject
Transaction ID	M				_	
A	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	М				YES	reject
>>J		1 <maxj></maxj>			-	
>>>G		03,			EACH	reject
С	M				YES	reject
>K		1 <maxk></maxk>			EACH	ignore and notify
>>L		1 <maxl></maxl>			-	
>>>M	0				-	
D	M				YES	reject

Note 1. The IEs F, J, and L do not have assigned criticality. The IEs F, J, and L are consequently realised as the ASN.1 type SEQUENCE OF of "ordinary" ASN.1 type, e.g. INTEGER. On the other hand, the repeatable IEs with assigned criticality are realised as the ASN.1 type SEQUENCE OF of an IE object, e.g. ProtocolIE-Single-Container.

For the corresponding ASN.1 layout, see subclause C.4.

C.2 Example on a Received EXAMPLE MESSAGE

Assume further more that a received message based on the above tabular format is according to the figure below.

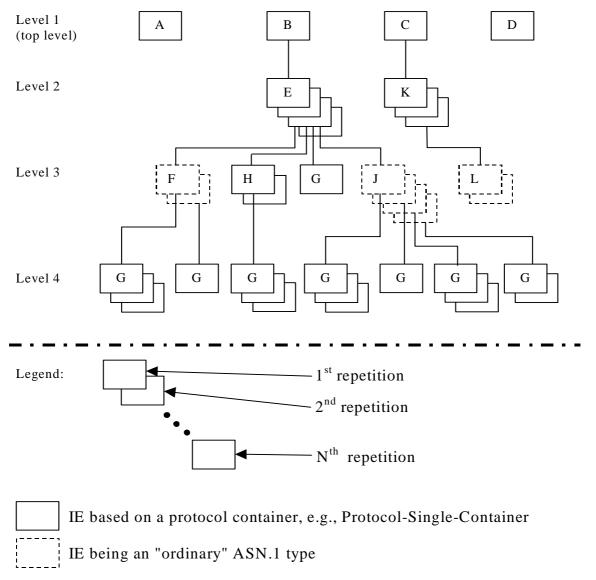
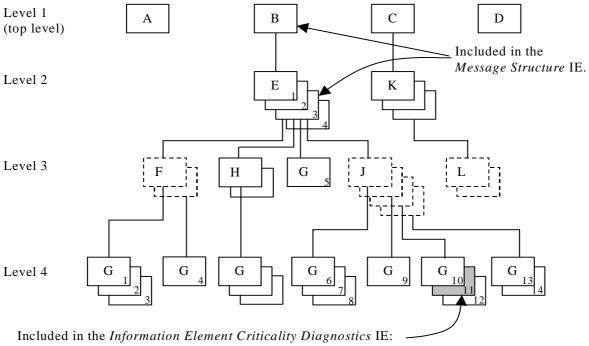


Figure C.1: Example of content of a received NBAP message based on the EXAMPLE MESSAGE

C.3 Content of Criticality Diagnostics

C.3.1 Example 1



- a) IE ID IE
- b) Repetition Number IE

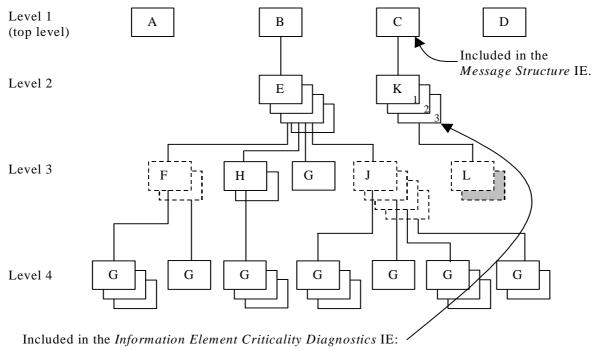
Figure C.2: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment			
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.			
IE ID	id-G	IE ID from the reported level, i.e. level 4.			
Repetition	11	Repetition number on the reported level, i.e. level 4.			
Number		(Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE this is the eleventh occurrence of IE G within the IE E (level 2).			
Type of Error	not				
	underst				
	ood				
Message Structur	e, first repe	etition			
>IE ID	id-B	IE ID from level 1.			
Message Structur	Message Structure, second repetition				
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.			
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.			

- Note 2. The IE J on level 3 cannot be included in the *Message Structure* IE since they have no criticality of their own.
- Note 3. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

C.3.2 Example 2



- a) IE ID IE
- b) Repetition Number IE

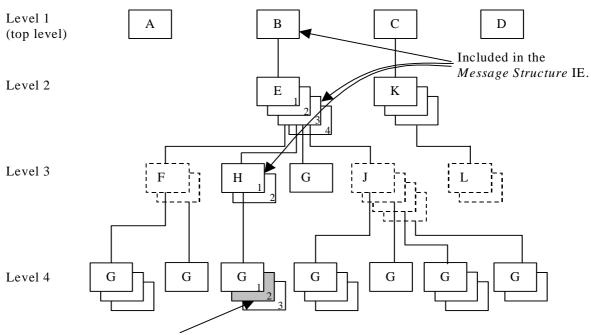
Figure C.3: Example of a received NBAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment		
IE Criticality	ignore	Criticality for IE on the reported level, i.e. level 2.		
	and			
	notify			
IE ID	id-K	IE ID from the reported level, i.e. level 2.		
Repetition	3	Repetition number on the reported level, i.e. level 2.		
Number				
Type of Error	not			
	underst			
	ood			
Message Structure, first repetition				
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.		

Note 4. The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

C.3.3 Example 3



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

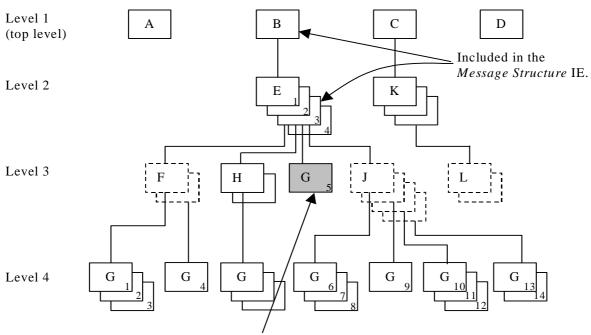
Figure C.4: Example of a received NBAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE H shown in the figure C.4 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment				
IE Criticality	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 Number	2	Repetition number on the reported level, i.e. level 4.				
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 Structure, third repetition						
>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

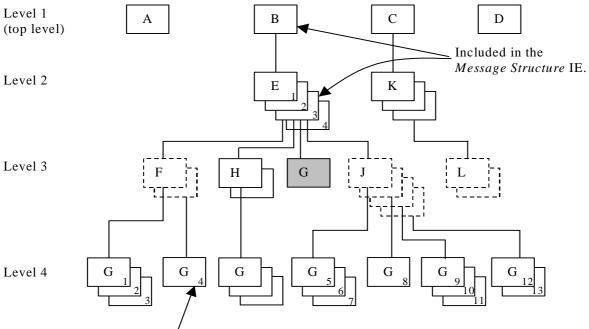
Figure C.5: Example of a received NBAP message containing a not comprehended IE

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 Number	5	Repetition number 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 this is the fifth occurrence of IE G within the IE E (level 2).			
Type of Error	not underst ood				
Message Structu	re, first rep	etition			
>IE ID	id-B	IE ID from level 1.			
Message Structu	re, second	repetition			
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.			
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.			

Note 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 rep	etition			
>IE ID	id-B	IE ID from level 1.			
Message Structur	e, second	repetition			
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.			
>Repetition 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}}
}
ExampleMessage-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-A CRITICALITY reject TYPE A PRESENCE mandatory} | { ID id-B CRITICALITY reject TYPE B PRESENCE mandatory} | { ID id-C CRITICALITY reject TYPE C PRESENCE mandatory} | { ID id-D CRITICALITY reject TYPE D PRESENCE mandatory} ,
}
B ::= SEQUENCE {
                     E-List,
    iE-Extensions ProtocolExtensionContainer { {B-ExtIEs} } OPTIONAL,
B-ExtIES NBAP-PROTOCOL-EXTENSION ::= {
E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-IEs} }
E-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-E CRITICALITY ignore TYPE E PRESENCE mandatory }
E ::= SEOUENCE {
                     F-List,
                    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
G-List2 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G2-IEs} }
G2-IES NBAP-PROTOCOL-IES ::= {
   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 ::= {
   { ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J
J ::= SEQUENCE {
                  G-List4 OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
}
J-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G4-IEs} }
G4-IES NBAP-PROTOCOL-IES ::= {
   C ::= SEQUENCE {
                  K-List,
   iE-Extensions ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
C-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }
K-IES NBAP-PROTOCOL-IES ::= {
   { ID id-K CRITICALITY notify TYPE K PRESENCE mandatory }
K ::= SEQUENCE {
                  L-List,
   iE-Extensions ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
K-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
L-List ::= SEQUENCE (SIZE (1..maxL)) OF L
L ::= SEQUENCE {
                  M OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {L-ExtIEs} } OPTIONAL,
L-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
ExampleMessage-Extensions NBAP-PROTOCOL-EXTENSION ::= {
```

Annex D (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, 388,	RP-010125 RP-010126	3.5.0	Approved at TSG RAN #11

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
March 01	11	RP-010160	373, 387		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			Approved at TSG RAN #11 and placed under Change Control	-	4.0.0
March 01	11	RP-010164	358, 359		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			Approved at TSG RAN #12	4.0.0	4.1.0
06/2001	12	RP-010384	412, 416, 421, 423, 427, 431, 433, 437, 439, 441		Approved at TSG RAN #12	4.0.0	4.1.0
06/2001	12	RP-010385			Approved at TSG RAN #12	4.0.0	4.1.0
06/2001	12	RP-010396	413, 414, 415, 416, 417, 418, 419, 450, 451, 452, 453, 454, 465		Approved at TSG RAN #12	4.0.0	4.1.0

History

	Document history					
V4.0.0	March 2001	Publication				
V4.1.0	June 2001	Publication				